

SHARP SERVICE MANUAL

No. S49Y6LC46SB57



LCD COLOR TELEVISION

LC-46SB57U

MODELS LC-52SB57U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

CONTENTS

SAFETY PRECAUTION

IMPORTANT SERVICE SAFETY PRECAUTION.....i	
PRECAUTIONS A PRENDRE LORS DE LA REPARATION.....ii	
PRECAUTIONS FOR USING LEAD-FREE SOLDER iii	

CHAPTER 1. SPECIFICATIONS

[1] SPECIFICATIONS	1-1
--------------------------	-----

CHAPTER 2. OPERATION MANUAL

[1] OPERATION MANUAL	2-1
----------------------------	-----

CHAPTER 3. DIMENSIONS

[1] DIMENSIONS (LC-46SB57U).....	3-1
[2] DIMENSIONS (LC-52SB57U).....	3-2

CHAPTER 4. REMOVING OF MAJOR PARTS

[1] REMOVING OF MAJOR PARTS (LC-46SB57U).....	4-1
[2] REMOVING OF MAJOR PARTS (LC-52SB57U).....	4-7

CHAPTER 5. ADJUSTMENT

[1] ADJUSTMENT PROCEDURE	5-1
[2] PUBLIC MODE SETTING PROCEDURE	5-16

CHAPTER 6. TROUBLESHOOTING TABLE

[1] TROUBLESHOOTING TABLE	6-1
---------------------------------	-----

CHAPTER 7. OVERALL WIRING/SYSTEM BLOCK DIAGRAM

[1] OVERALL WIRING DIAGRAM	7-1
[2] SYSTEM BLOCK DIAGRAM	7-2

CHAPTER 8. PRINTED WIRING BOARD ASSEMBLIES

[1] KEY Unit	8-1
[2] MAIN Unit	8-2
[3] R/C, LED Unit	8-6

CHAPTER 9. SCHEMATIC DIAGRAM

[1] DESCRIPTION OF SCHEMATIC DIAGRAM	9-1
[2] KEY Unit	9-2
[3] MAIN Unit	9-3
[4] R/C, LED Unit	9-19

Parts Guide

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SAFETY PRECAUTION

IMPORTANT SERVICE SAFETY PRECAUTION

- Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

■WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE FUSE.

F7000 (250V 6.3A)

■BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

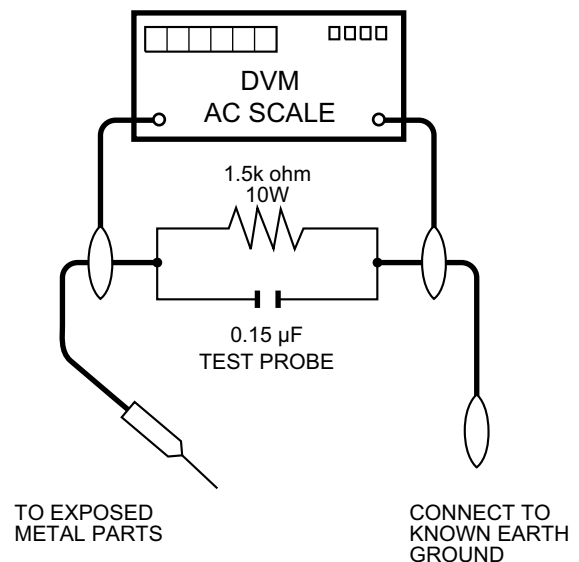
Before returning the receiver to the user, perform the following safety checks:

3. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
4. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
5. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC cord directly into a 120 volt AC outlet.
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.

- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

Any reading of 0.75 Vrms (this corresponds to 0.5 mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD color television have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts List and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit.

The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.

■ AVERTISSEMENT

1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.

PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE

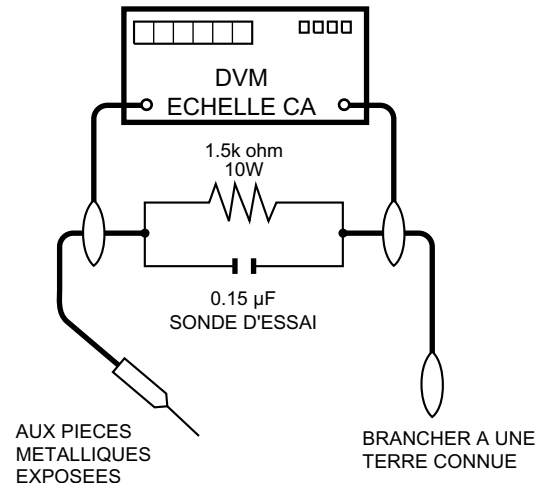
F7000 (250V 6.3A)

■ VERIFICATIONS CONTRE L'INCENDIE ET LE CHOC ELECTRIQUE

Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

3. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
4. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistancecapacité, les isolateurs mécaniques, etc.
5. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la façon suivante:
 - Brancher le cordon d'alimentation directement à une prise de courant de 120V. (Ne pas utiliser de transformateur d'isolation pour cet essai).

- A l'aide de deux fils à pinces, brancher une résistance de 1.5 k Ω 10 watts en parallèle avec un condensateur de 0.15 μ F en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une conduite électrique ou une prise de terre branchée à la terre.
- Utiliser un voltmètre CA d'une sensibilité d'au moins 5000 Ω /V pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)
La tension de pointe mesurée ne doit pas dépasser 0.75V (correspondante au courant CA de pointe de 0.5mA). Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseur ACL présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.

Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque "⚡" et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.

Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

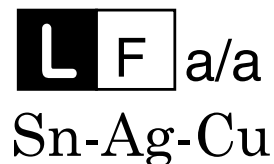
PRECAUTIONS FOR USING LEAD-FREE SOLDER**■Employing lead-free solder**

- “PWBs” of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:



Indicates lead-free solder of tin, silver and copper.



Indicates lead-free solder of tin, silver and copper.

■Using lead-free wire solder

- When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40 °C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

■Soldering

- As the melting point of lead-free solder (Sn-Ag-Cu) is about 220 °C which is higher than the conventional lead solder by 40 °C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

- Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

PARTS CODE	PRICE RANK	PART DELIVERY	DESCRIPTION
ZHNDai123250E	BL	J	φ0.3mm 250g (1roll)
ZHNDai126500E	BK	J	φ0.6mm 500g (1roll)
ZHNDai12801KE	BM	J	φ1.0mm 1kg (1roll)

CHAPTER 1. SPECIFICATIONS

[1] SPECIFICATIONS

Item			Model: LC-46SB57U	Model: LC-52SB57U
LCD panel			46" Class (45 ⁶³ / ₆₄ " Diagonal) Advanced Super View & BLACK TFT LCD	52" Class (52 ¹ / ₃₂ " Diagonal) Advanced Super View & BLACK TFT LCD
Resolution			2,073,600 pixels (1,920 × 1,080)	
TV Function	TV-standard (CCIR)		American TV Standard ATSC/NTSC System	
	Receiving Channel	VHF/UHF	VHF 2-13ch, UHF 14-69ch	
		CATV	1-135ch (non-scrambled channel only)	
		Digital Terrestrial Broadcast (8VSB)	2-69ch	
		Digital cable ^{*1} (64/256 QAM)	1-135ch (non-scrambled channel only)	
	Audio multiplex		BTSC System	
Audio out			10W × 2	
Terminals	Rear	INPUT 1	AV in, COMPONENT in	
		INPUT 2	COMPONENT in, S-VIDEO in	
		INPUT 4	ANALOG RGB (PC) in (15-pin mini D-sub female connector), Audio in (Ø 3.5 mm jack)	
		INPUT 6	HDMI in with HDCP, Audio in (Ø 3.5 mm jack)	
		INPUT 7	HDMI in with HDCP	
		INPUT 8	HDMI in with HDCP	
		ANT/CABLE	75 Ω Unbalance, F Type × 1 for Analog (VHF/UHF/CATV) and Digital (AIR/CABLE)	
		AUDIO	Audio in (Ø 3.5 mm jack)	
		DIGITAL AUDIO OUTPUT	Optical Digital audio output × 1 (PCM/Dolby Digital)	
		OUTPUT	Audio out	
	RS-232C	9-pin D-sub male connector		
	Side	INPUT 3	AV in	
		INPUT 5	HDMI in with HDCP	
SERVICE		Software update		
OSD language			English/French/Spanish	
Power Requirement			AC 120 V, 60 Hz	
Power Consumption			254 W (0.5 W Standby with AC 120 V)	290 W (0.5 W Standby with AC 120 V)
Weight	TV + stand		49.6 lbs./22.5 kg	58.5 lbs./26.5 kg
	TV only		39.7 lbs./18.0 kg	50.7 lbs./23.0 kg
Dimension ^{*2} (W × H × D)	TV + stand		43 ⁵³ / ₆₄ × 30 ³ / ₆₄ × 13 ¹ / ₂ inch	49 ¹⁹ / ₆₄ × 33 ²⁵ / ₃₂ × 13 ¹ / ₂ inch
	TV only		43 ⁵³ / ₆₄ × 27 ⁴⁷ / ₆₄ × 3 ²⁹ / ₃₂ inch	49 ¹⁹ / ₆₄ × 31 ¹¹ / ₃₂ × 3 ⁴³ / ₆₄ inch
Operating temperature			+32°F to +104°F (0°C to +40°C)	

^{*1} Emergency alert messages via Cable are unreceivable.

^{*2} The dimensional drawings are shown on the Spanish operation manual.

- As part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Optional Accessory

The listed optional accessory is available for the Liquid Crystal Television. Please purchase it at your nearest shop.

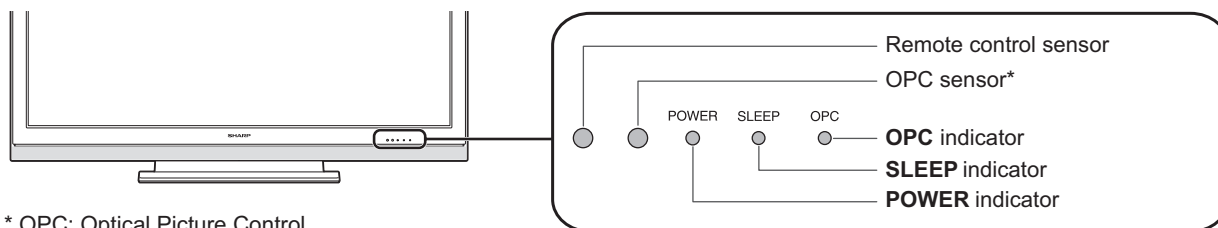
- Additional optional accessories may be available in the near future. When purchasing, please read the newest catalogue for compatibility and check the availability.

Part name	Model number
Wall mount bracket	AN-52AG4

CHAPTER 2. OPERATION MANUAL

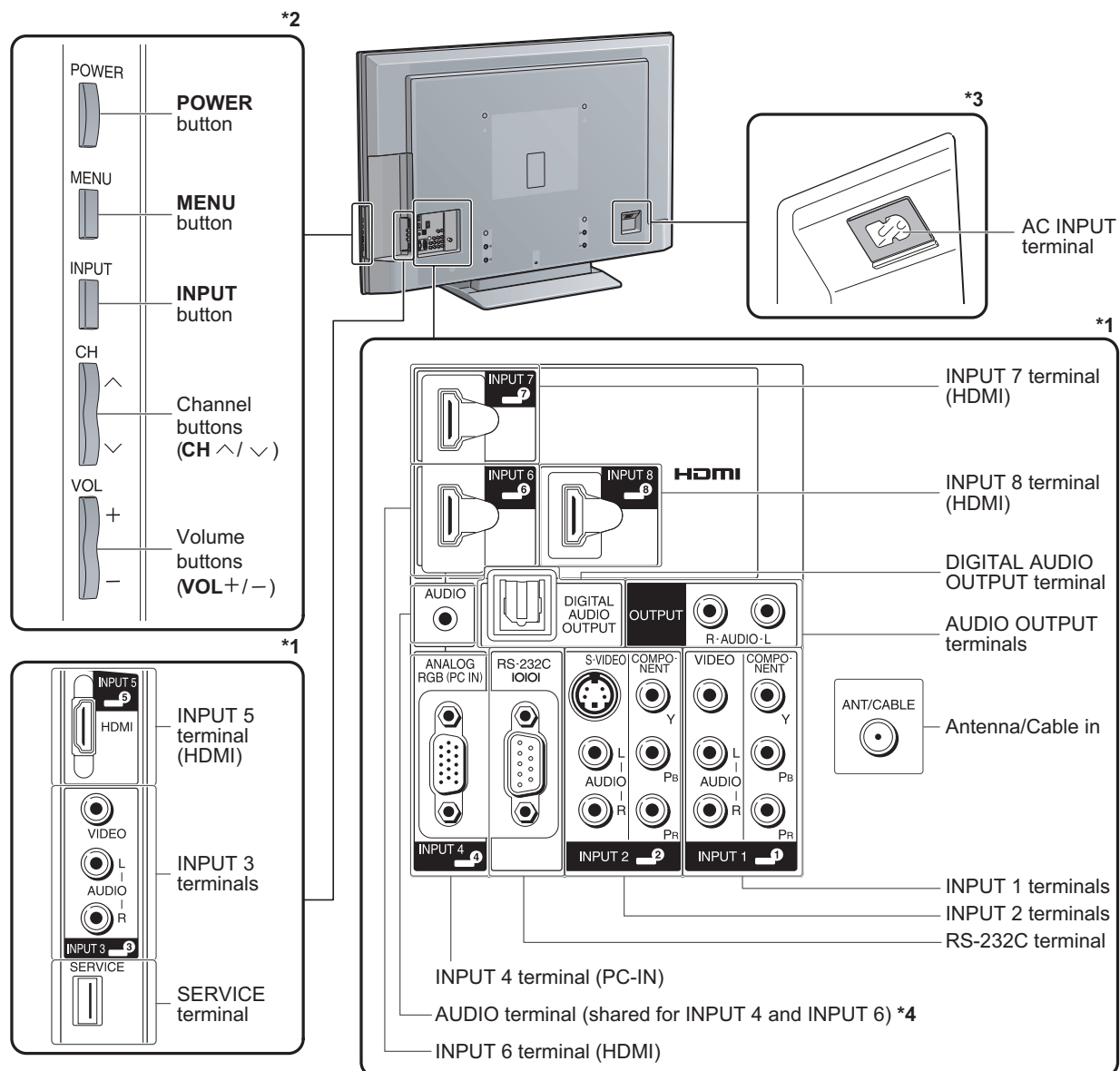
[1] OPERATION MANUAL

TV (Front)



* OPC: Optical Picture Control

TV (Rear/Side)



*1 External equipment connection.

*2 Button operations.

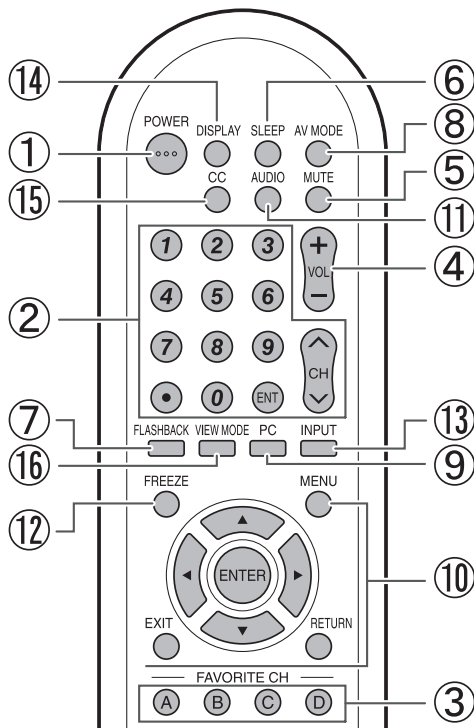
*3 Connecting the AC cord.

*4 Details on the PC Audio Select function.

NOTE

- The illustrations in this operation manual are for explanation purposes and may vary slightly from the actual operations.
- The examples used throughout this manual are based on the LC-52SB57U model.

Direct Button Operation



① POWER

You can turn on the TV or put it on standby by pressing **POWER** on the TV or on the remote control unit.

② Changing Channels

You can change channels by pressing **CH** $\wedge$ / $\vee$ or **0-9**, • (DOT).

Examples:

To select a 1 or 2-digit channel number (e. g., Channel 5):
Press **5** $\rightarrow$ **ENT**.

To select a 3-digit channel number (e. g., Channel 115):
Press **1** $\rightarrow$ **1** $\rightarrow$ **5** $\rightarrow$ **ENT**.

To select a 4-digit channel number (e. g., Channel 22.1):
Press **2** $\rightarrow$ **2** $\rightarrow$ • (DOT) $\rightarrow$ **1** $\rightarrow$ **ENT**.

NOTE

- When selecting a 1-digit channel number, it is not necessary to press **0** before the number.
- When you enter **0-9** only, channel selection will be made if there is no operation within a few seconds.
- If you push "0" by itself, nothing will happen.
- Complete the above steps within a few seconds.
- When you enter **0-9** and • (DOT), channel selection will be made if there is no operation within a few seconds.

③ FAVORITE CH

You can select 4 preset favorite channels in 4 different categories.

Press **A**, **B**, **C** or **D**.

- While watching the TV, you can toggle the selected channels by pressing **A**, **B**, **C** and **D**.

NOTE

- Details of favorite channel settings.

④ Changing Volume

You can change the volume by pressing **VOL** $\pm$ on the TV or on the remote control unit.

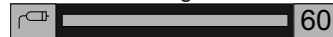
- To increase the volume, press **VOL** $+$.
- To decrease the volume, press **VOL** $-$.



Audio status

Output device	Output Select	
	Fixed	Variable
Speaker	Variable sound	Mute

- When "Output Select" is set to "Variable", the indicator on the screen changes as shown below.



NOTE

- Details on the Output Select function.

⑤ MUTE

Mutes the current sound output.

Press **MUTE**.

- " $\times$ " will be displayed on the screen for 30 minutes, and the sound is silenced.

NOTE

- Within 30 minutes of pressing **MUTE**, mute can be canceled by pressing **VOL** $\pm$ or **MUTE**.
- Mute will be canceled after 30 minutes have passed. However, the TV will not suddenly output a loud sound as the volume level is set to 0 automatically.

⑥ Sleep Timer

Allows you to set a time when the TV automatically switches to standby.

Press **SLEEP**.

- The remaining time displays when the sleep timer has been set.
- Each time you press **SLEEP**, the remaining time switches as shown below.

Off $\rightarrow$ 30 $\rightarrow$ 60 $\rightarrow$ 90 $\rightarrow$ 120

- When set, the time automatically starts counting down.
- If you want to adjust the sleep timer, you can press **SLEEP** twice then change the time setting.
- When it is 5 minutes before the time expires, the remaining time will start to keep appearing every minute.

NOTE

- Select "Off" by pressing **SLEEP** to cancel the sleep timer.
- The TV will enter standby when the remaining time reaches 0.
- When the sleep timer is set, its indicator on the TV lights red.

⑦ FLASHBACK

Press **FLASHBACK** to switch to the previously tuned channel.

- Press **FLASHBACK** again to switch back to the currently tuned channel.

NOTE

- FLASHBACK** will not work if no channel has been changed after the TV is turned on.

13 INPUT

To view external source images, select the input source using **INPUT** on the remote control unit or on the TV.

1 Press **INPUT**.

- A list of selectable sources appears.

2 Press **INPUT** again or press **▲/▼** to select the input source.

- An image from the selected source automatically displays.
- Each time **INPUT** is pressed, the input source toggles.
- If the corresponding input is not plugged in, you cannot change the input. Be sure to connect the equipment beforehand.

NOTE

- External equipment connection.
- Press **PC** to switch to an image from the PC.

14 DISPLAY

Displays channel information being viewed. Press **DISPLAY**.

15 Closed Captions and Digital Closed Captions

Your TV is equipped with an internal Closed Caption decoder. It allows you to view conversations, narration and sound effects as subtitles on your TV. Closed Captions are available on some TV programs and on some VHS home video tapes at the discretion of the program provider.

Digital Closed Caption service is a new caption service available only on digital TV programs (also at the discretion of the service provider). It is a more flexible system than the original Closed Caption system, because it allows for a variety of caption sizes and font styles. When the Digital Closed Caption service is in use, it will be indicated by the appearance of a 3-letter abbreviation that also indicates the language of the Digital Closed Captions: ENG (English), SPA (Spanish), FRA (French) or other language codes.

Not all programs and VHS videotapes offer closed captions. Please look for the "CC" symbol to ensure that captions will be shown.

In the Closed Caption system, there can be more than one caption service provided. Each is identified by its own number. The "CC1" and "CC2" services display subtitles of TV programs superimposed over the program's picture.

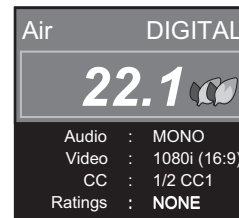
In the Closed Caption system, the "Text1" or "Text2" services display text that is unrelated to the program being viewed (e.g., weather or news). These services are also superimposed over the program currently being viewed.

1 Press **CC**.

- This will present the Closed Caption information display.

2 Press **CC** while the Closed Caption information is still on the screen.

- Press repeatedly until you select the desired closed caption service.



- Depending on the number of caption services in the signal being received, you will see information such as 1/2 or 1/4 displayed. 1/2 means "the first of two services".

Example:

If a program has three services (Digital CC(ENG), CC1 and Text1), the closed caption display will toggle in this sequence:

1/3 ENG → 2/3 CC1 → 3/3 Text1 → Off

- The **CC** button keeps a record of the last service selected in its memory. If the last closed caption mode (e.g. 1/3ENG) you selected is not available for the next program, or on another channel, the closed caption service that is available is automatically selected, and this service appears in parentheses, e.g. "1/3(CC1)". Closed Caption services that appear in parentheses will not be stored in the **CC** button's memory as your last selected service. Only services that you have selected with the **CC** button are stored.

Examples:

In a case where there are two closed caption services provided (for instance, Digital CC(ENG) and CC1), and Digital CC(ENG) is displayed as your current selection, if Digital CC(ENG) is not broadcast for the next program, the other closed caption service, CC1, will be displayed in parentheses. A closed caption service appears in parentheses because the service you selected is not available and a different service is displayed on your screen. "1/1(CC1)" is displayed instead of "1/2/ENG".

NOTE

- When "Power Saving" is set to "Standard" or "Advanced", the Power Saving leaf icon appears on the channel information window. Details of Power Saving settings.
- Detailed closed caption settings.
- When the program contains no closed caption, "--" displays in the closed caption information.
- If the language code, e.g. "ENG", is not found on Digital TV programs, "--" will be shown.
- Four kinds of closed caption service (CC1, CC2, Text1, Text2) are potentially available, but a broadcast may contain none or only some of these services at the discretion of the program provider.

16 VIEW MODE

You can select the screen size.

1 Press **VIEW MODE**.

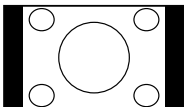
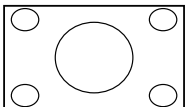
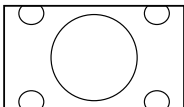
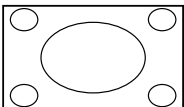
- The View Mode menu displays.
- The menu lists the View Mode options selectable for the type of video signal currently being received.

2 Press **VIEW MODE** or **▲/▼** while the View Mode menu is displayed to select a desired item on the menu.

- You can sequentially select a View Mode that has its own aspect ratio.

■ For 4:3 programs

Example: Screen size images

Side Bar	S.Stretch (Smart stretch)	Zoom	Stretch
			
Suitable for viewing conventional 4:3 programs in their normal format.	Suitable for stretching 4:3 programs to fill the screen.	Suitable for viewing wide-screen 2.35:1 anamorphic DVDs in full screen.	This mode is useful for 1.78:1 DVDs. When viewing 1.85:1 DVDs, stretch mode will still show very thin black bands at the top and bottom of the screen.

■ For HD programs

Stretch: Suitable for viewing wide-screen 1.78:1 aspect ratio program, stretch mode will still show very thin black bands at the top and bottom of the screen.

Dot by Dot (1080i/p only): Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

Full Screen (720p only): You can select "Full Screen" only when receiving a 720p signal.

S.Stretch (Smart stretch): Suitable for stretching 4:3 programs to fill the screen.

Zoom: Suitable for viewing wide-screen 2.35:1 aspect-ratio programs in full screen.

NOTE

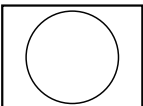
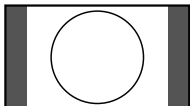
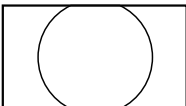
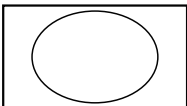
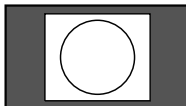
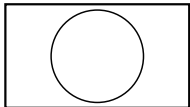
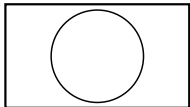
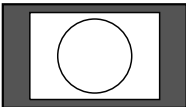
- When using Dot by Dot or Full Screen, it is possible to see noise or bars around different outer portions of the screen. Please change view mode to correct this.

■ For PC input mode

NOTE

- Connect the PC before making adjustments.
- Selectable screen size may vary with input signal type.

Example: Screen size images

Input signal  4:3		Normal  Keeps the original aspect ratio in a full screen display.	Zoom  For viewing widescreen programs. The top and bottom of the image is cropped.	Stretch  An image fully fills the screen.	Dot by Dot  Detects the resolution of the signal and displays an image with the same number of pixels on the screen.
Input signal  16:9		Stretch  An image fully fills the screen.	Dot by Dot  Detects the resolution of the signal and displays an image with the same number of pixels on the screen.		

QUICK REFERENCE

Attaching/Detaching the Stand

- Before attaching (or detaching) the stand, unplug the AC cord from the AC INPUT terminal.
- Before performing work spread cushioning over the base area to lay the TV on. This will prevent it from being damaged.

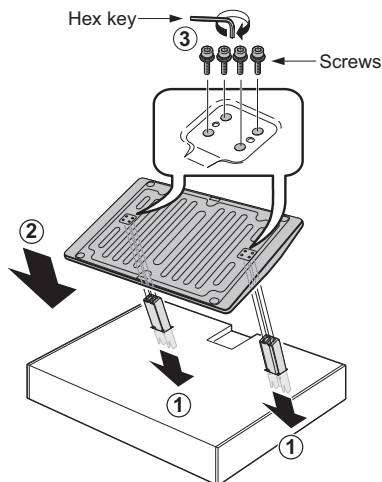
CAUTION

- **Attach the stand in the correct direction.**
- **Do not remove the stand from the TV unless using an optional wall mount bracket to mount it.**
- **Be sure to follow the instructions. Incorrect installation of the stand may result in the TV falling over.**

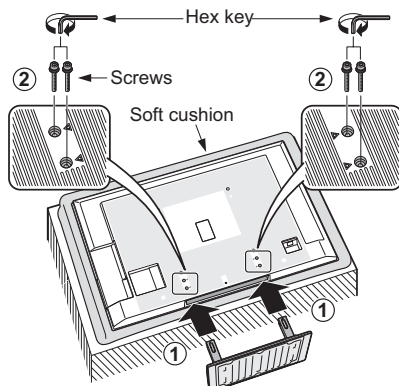
- 1 Confirm that there are 12 screws (all the same size) and a hex key supplied with the stand unit.



- 2 ① Set the post for the stand unit onto the box.
- ② Attach the base to the post.
- ③ Insert and tighten the 8 screws into the 8 holes on the bottom of the base.



- 3 ① Insert the stand into the openings on the bottom of the TV.
- ② Insert and tighten the 4 screws into the 4 holes on the rear of the TV.



NOTE

- To detach the stand, perform the steps in reverse order.

Setting the TV on the Wall

CAUTION

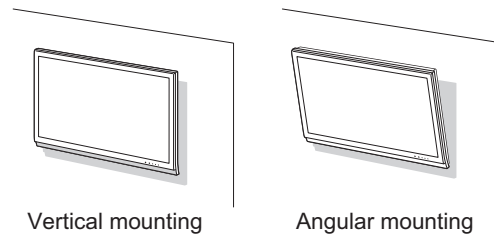
- **This TV should be mounted on the wall only with the AN-52AG4 (SHARP) wall mount bracket. The use of other wall mount brackets may result in an unstable installation and may cause serious injuries.**
- **Installing the TV requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.**

Using an optional bracket to mount the TV

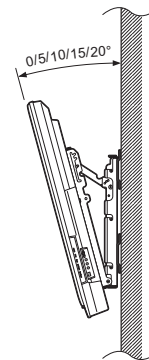
- You can ask a qualified service professional about using an optional AN-52AG4 bracket to mount the TV to the wall.
- Carefully read the instructions that come with the bracket before beginning work.

Hanging on the wall

AN-52AG4 wall mount bracket.
(See the bracket instructions for details.)



About setting the TV angle



LC-46SB57U

- The "b" position is at the center of the display.

LC-52SB57U

- The center of the display: $\frac{19}{64}$ inch (7.3 mm) under the "f" position.
- Refer to the operation manual of AN-52AG4 for details.

NOTE

- Detach the cable clamp on the rear of the TV when using the optional mount bracket.
- To use this TV mounted on a wall, remove the covers at the 4 locations on the rear of the TV, and then use the screws supplied with the wall mount bracket to secure the bracket to the rear of the TV.

Appendix

Troubleshooting

Problem	Possible Solution
No power	- Check if you pressed POWER on the remote control unit. If the indicator on the TV does not light up, press POWER on the TV. - Is the AC cord disconnected? - Has the power been turned on?
Unit cannot be operated.	External influences such as lightning, static electricity, may cause improper operation. In this case, operate the unit after first turning off the power of the TV or unplugging the AC cord and replugging it in after 1 or 2 minutes.
Remote control unit does not operate.	- Are batteries inserted with polarity (+, -) aligned? - Are batteries worn out? (Replace with new batteries.) - Are you using it under strong or fluorescent lighting? - Is a fluorescent light illuminated near the remote control sensor?
Picture is cut off/with sidebar screen.	- Is the image position correct? - Are screen mode adjustments such as picture size made correctly?
Strange color, light color, or color misalignment	- Adjust the picture tone. - Is the room too bright? The picture may look dark in a room that is too bright.
Power is suddenly turned off.	- Is the sleep timer set? - Check the power control settings. - The unit's internal temperature has increased. Remove any objects blocking vent or clean.
No picture	- Is connection to other components correct? - Is correct input signal source selected after connection? - Is the correct input selected? - Is picture adjustment correct? - Is "On" selected in "Audio Only"? - Is a non-compatible signal being input?
No sound	- Is the volume too low? - Is "Variable" selected in "Output Select"? - Have you pressed MUTE on the remote control unit?
The TV sometimes makes a cracking sound.	This is not a malfunction. This happens when the cabinet slightly expands and contracts according to change in temperature. This does not affect the TV's performance.

Troubleshooting-Digital Broadcasting

The error message about reception of broadcast

The example of an error message displayed on a screen	Error code	Possible Solution
Failed to receive broadcast.	E202	Check the antenna cable. Check that the antenna is correctly setup.
No broadcast now.	E203	Check the broadcast time in the program guide.

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
 - Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the Liquid Crystal panel to malfunction.
- Storage temperature: - 4°F to + 140°F (- 20°C to + 60°C)

On-Screen Display Menu

Menu Items

For TV/INPUT 1/2/3 Mode

Picture Menu

OPC
 Backlight
 Contrast
 Brightness
 Color
 Tint
 Sharpness
 Advanced
 C.M.S.-Hue
 C.M.S.-Saturation
 C.M.S.-Value
 Color Temp
 Fine Motion Enhanced
 Active Contrast
 Gamma Adjustment
 Film Mode
 Digital Noise Reduction
 3D-Y/C
 Monochrome
 Range of OPC

Reset

Audio Menu

Treble
 Bass
 Balance
 Surround
 Bass Enhancer
 Reset

Power Control Menu

Power Saving
 No Signal Off
 No Operation Off

Setup Menu

EZ Setup
 CH Setup
 Antenna Setup-DIGITAL
 Input Skip
 Input Label
 Parental CTRL
 Position
 Language
 Reset

Option Menu

Audio Only
 Input Select
 PC Audio Select
 Output Select
 Color System
 Caption Setup
 Digital Caption Info
 Program Title Display
 Favorite CH
 Game Play Time
 Operation Lock Out
 Demo Mode

Digital Setup Menu

Audio Setup
 Identification
 Software Update

For HDMI/PC-IN Mode

Picture Menu

OPC
 Backlight
 Contrast
 Brightness
 Color
 Tint
 Sharpness
 Advanced
 C.M.S.-Hue
 C.M.S.-Saturation
 C.M.S.-Value
 Color Temp
 Fine Motion Enhanced
 Active Contrast
 Gamma Adjustment
 Film Mode
 Digital Noise Reduction
 Monochrome
 Range of OPC

Reset

Audio Menu

Treble
 Bass
 Balance
 Surround
 Bass Enhancer
 Reset

Power Control Menu

Power Saving
 No Signal Off
 No Operation Off

Setup Menu

Input Skip
 Auto Sync
 Input Label
 Fine Sync
 Position
 Language
 Reset

Option Menu

Audio Only
 HDMI Setup
 PC Audio Select
 Output Select
 Game Play Time
 Operation Lock Out
 Demo Mode

Digital Setup Menu

Software Update

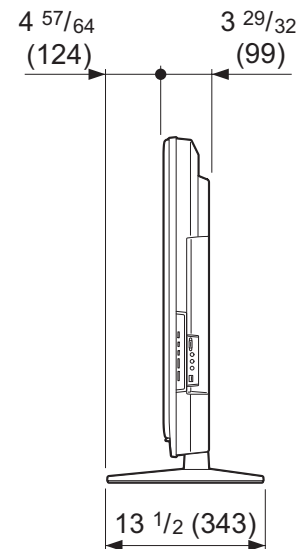
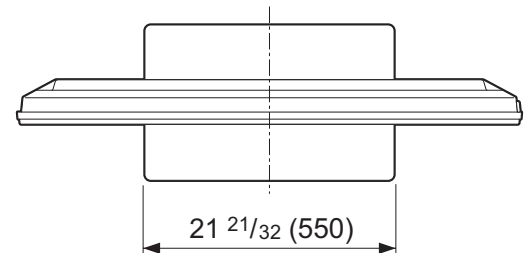
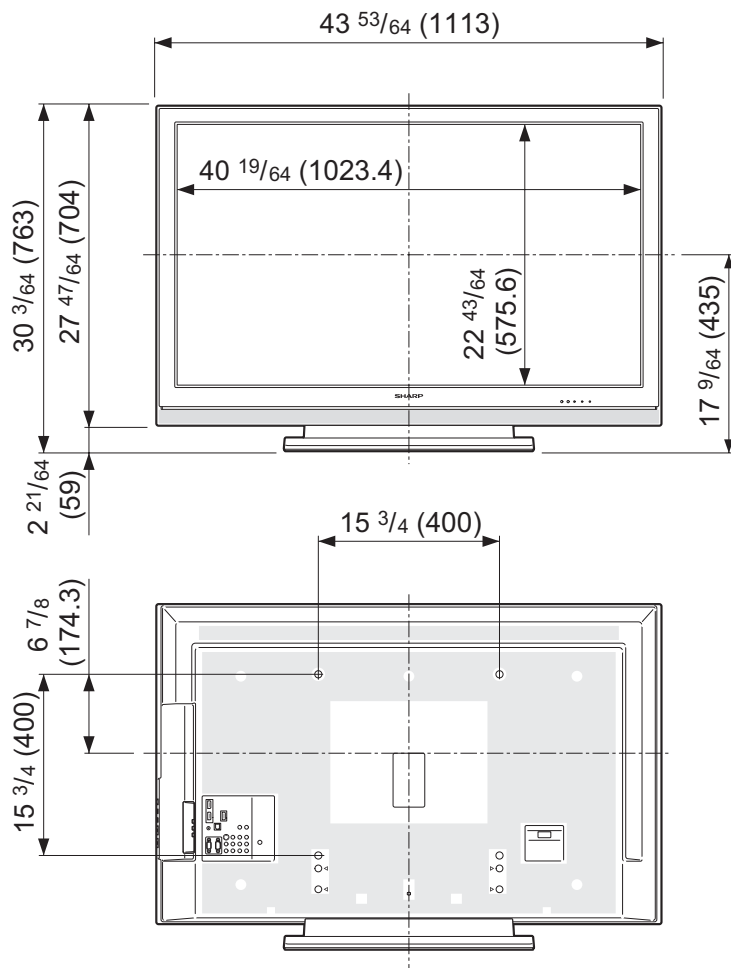
NOTE

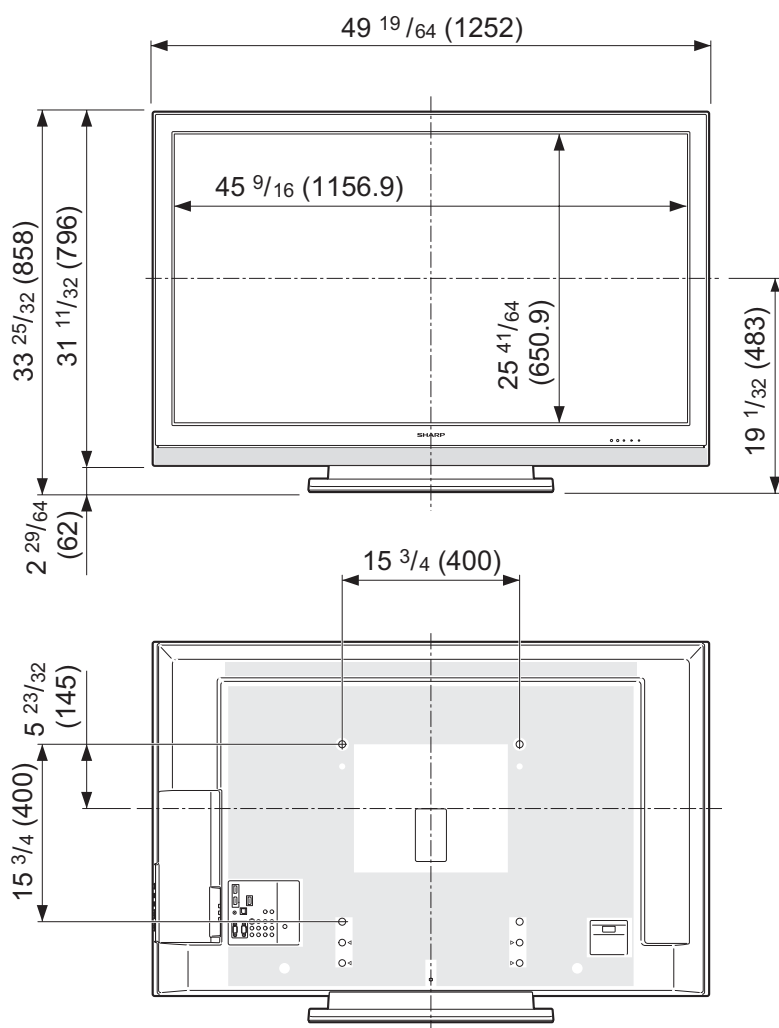
- Some menu items may not be displayed depending on the selected input source.

CHAPTER 3. DIMENSIONS

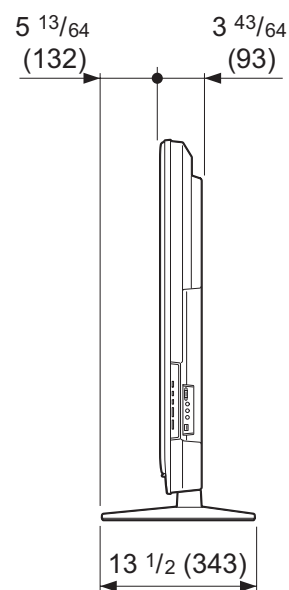
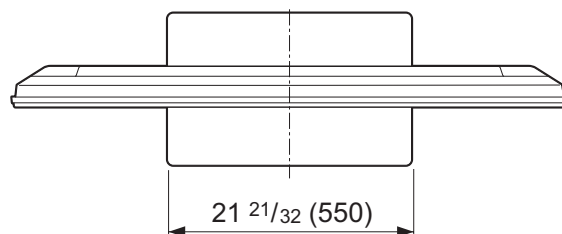
[1] DIMENSIONS (LC-46SB57U)

Unit: inch (mm)



[2] DIMENSIONS (LC-52SB57U)

Unit: inch (mm)

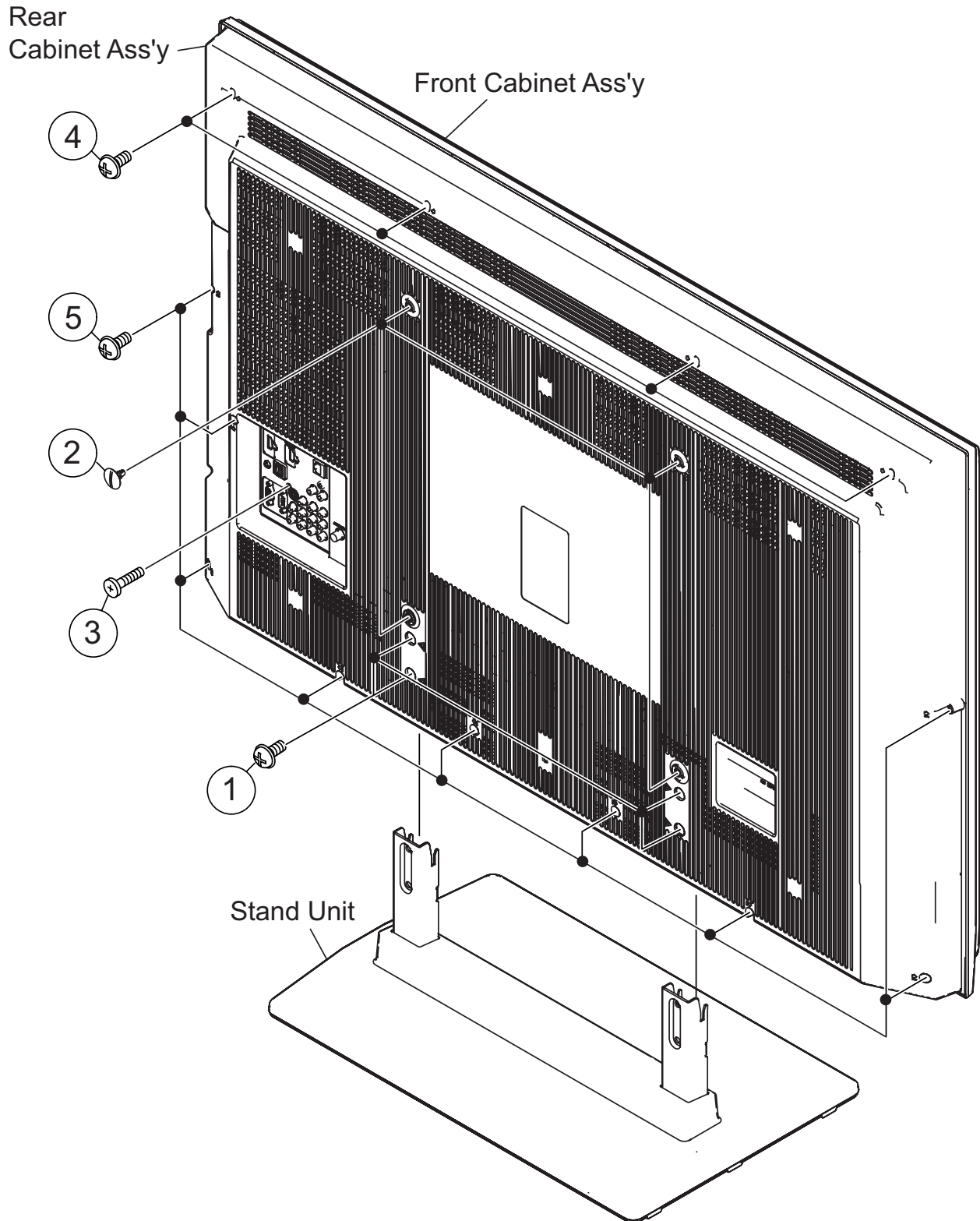


CHAPTER 4. REMOVING OF MAJOR PARTS

[1] REMOVING OF MAJOR PARTS (LC-46SB57U)

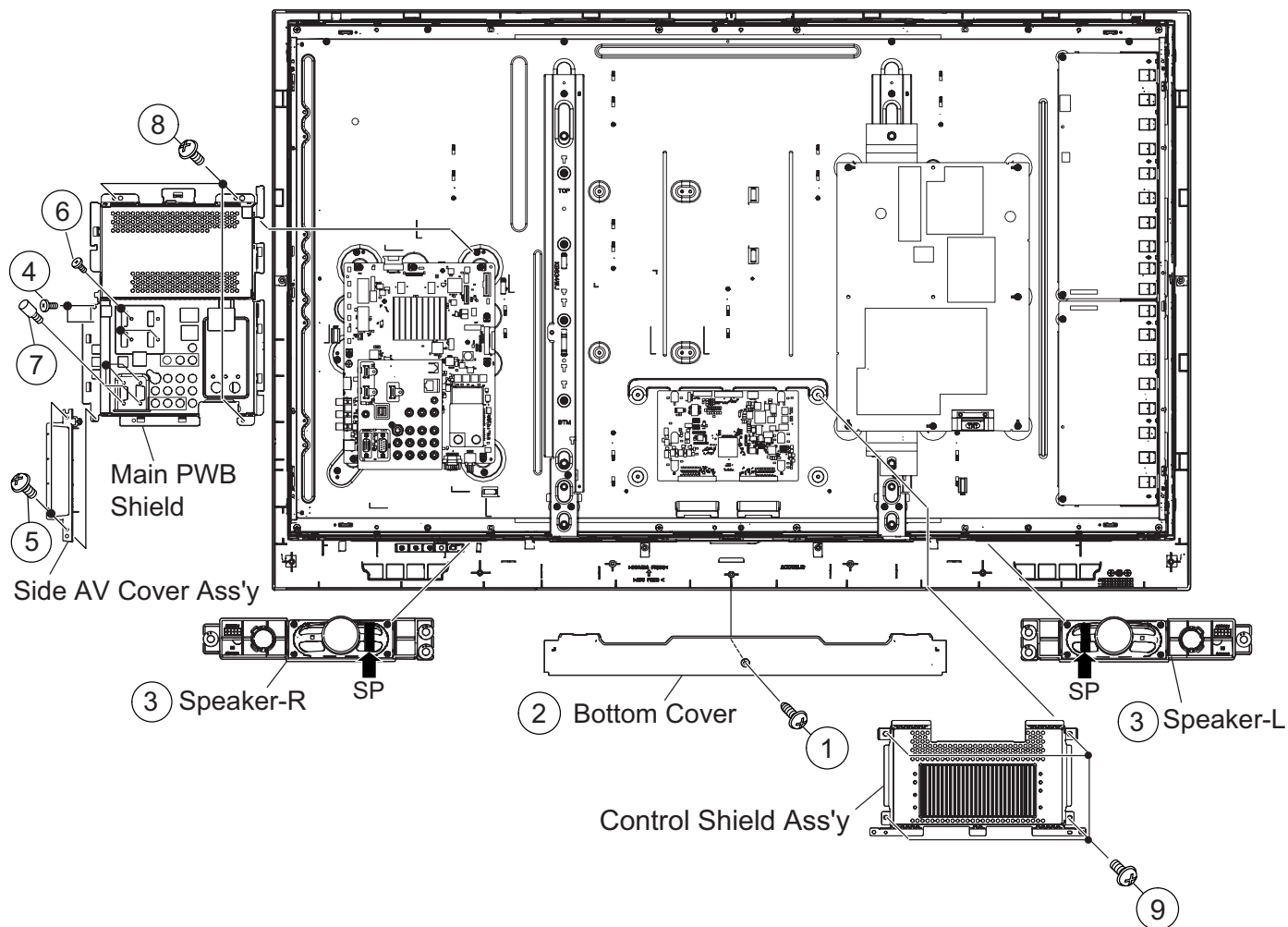
1. Removing of Stand Unit and Rear Cabinet Ass'y.

1. Remove the 4 lock screws ① and detach the Stand Unit.
2. Remove the 4 VESA Hole Covers ②.
3. Remove the 1 lock screw ③, 4 lock screws ④, 9 lock screws ⑤ and detach the Rear Cabinet Ass'y.



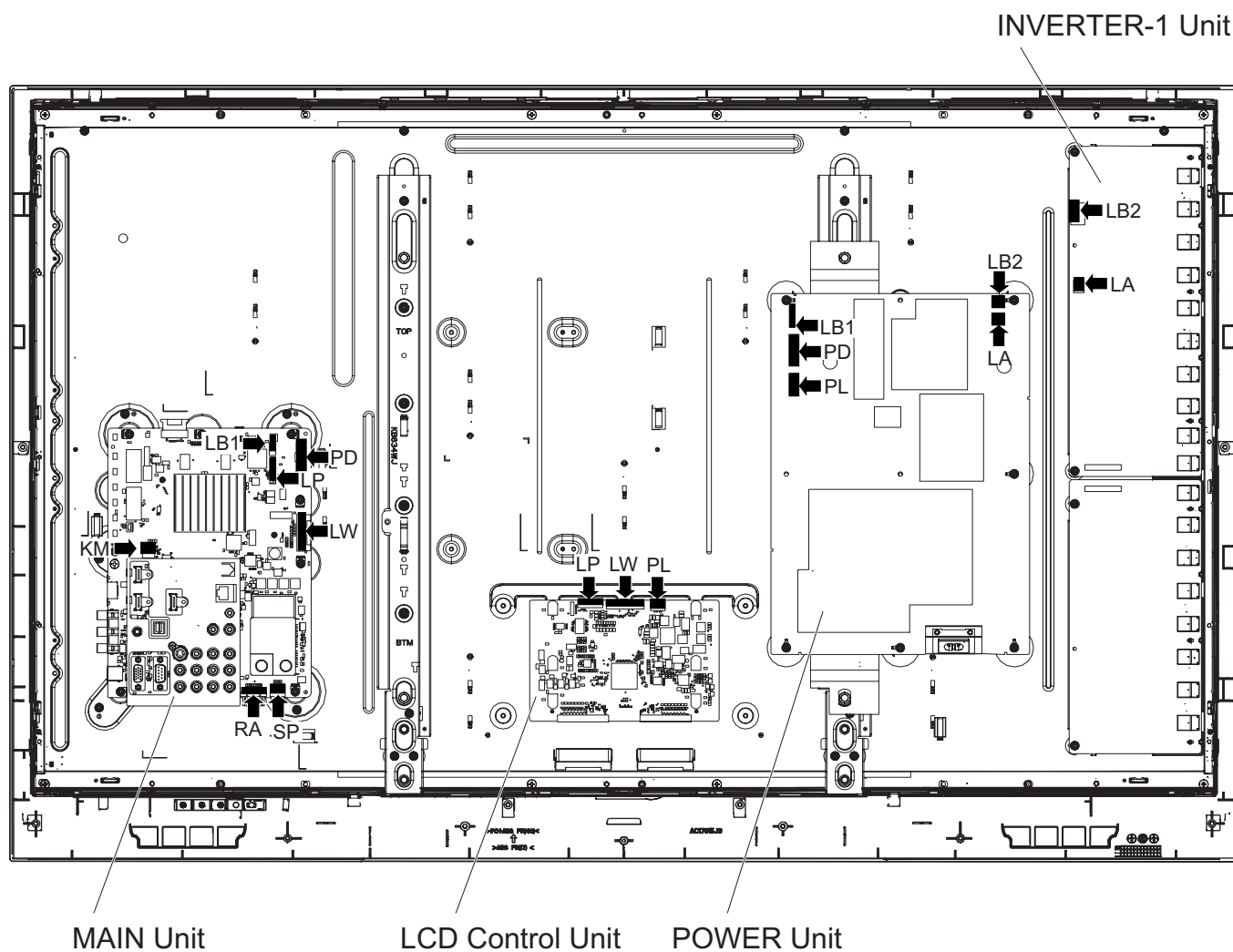
2. Removing of Bottom Cover, Speaker-L/R, Side AV Cover, Main PWB Shield and Control Shield.

1. Remove the 1 lock screw ① and detach the Bottom Cover ②.
2. Disconnect SP wire. Detach the Speaker-L/R ③.
3. Remove the 2 lock screws ⑤ and detach the Side AV Cover Ass'y.
4. Remove the 2 lock screws ④, 3 lock screws ⑥, 4 lock screws ⑦, 3 lock screws ⑧ and detach the Main PWB Shield.
5. Remove the 4 lock screws ⑨, and detach the Control Shield Ass'y.



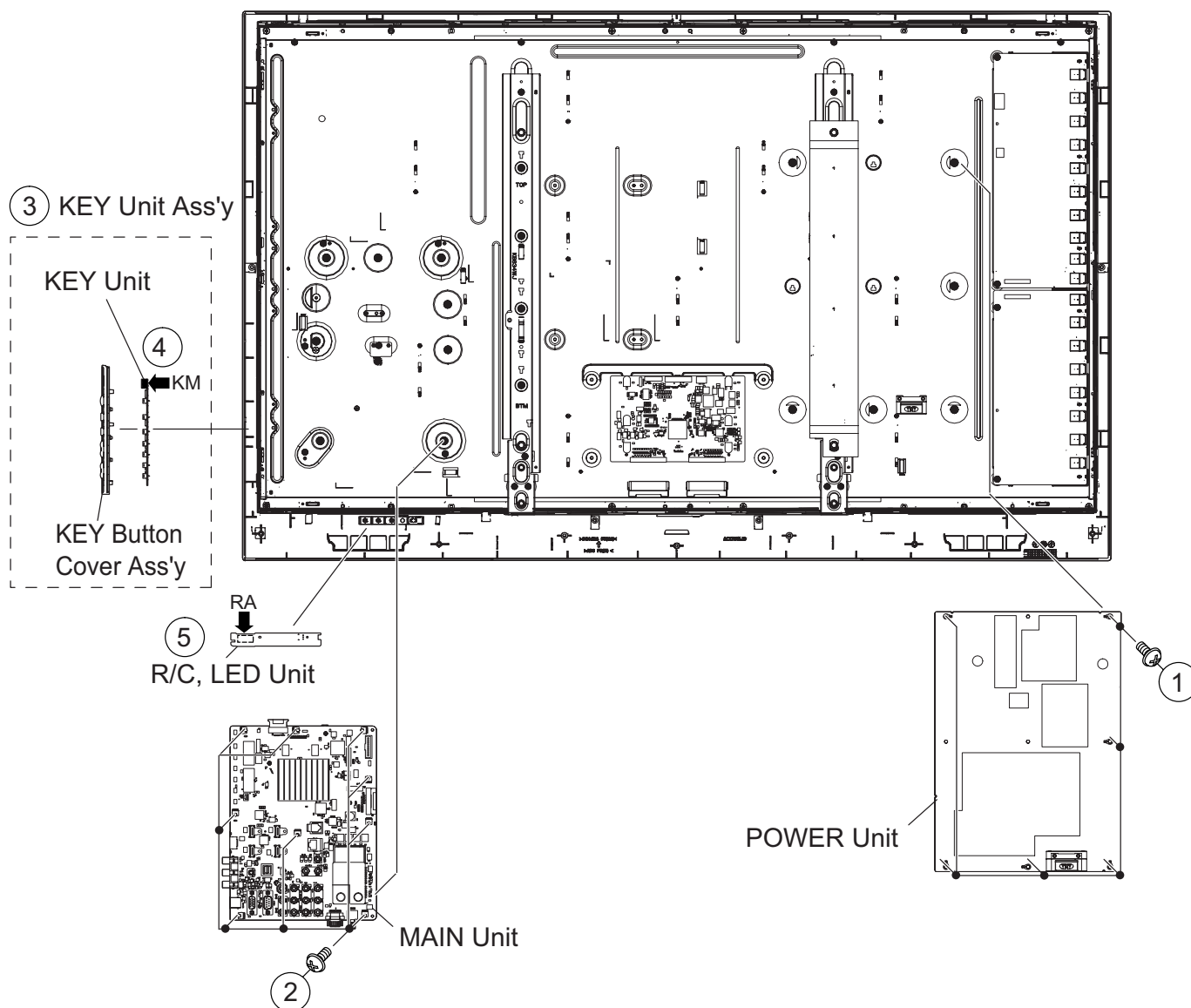
3. Removing of Connectors.

1. Disconnect the following connectors from MAIN Unit. (LB1, LP, PD, LW, RA, KM, SP)
2. Disconnect the following connectors from POWER Unit. (LB1, PD, PL, LB2, LA)
3. Disconnect the following connectors from INVERTER-1 Unit. (LB2, LA)
4. Disconnect the following connectors from LCD Control Unit. (LP, LW, PL)



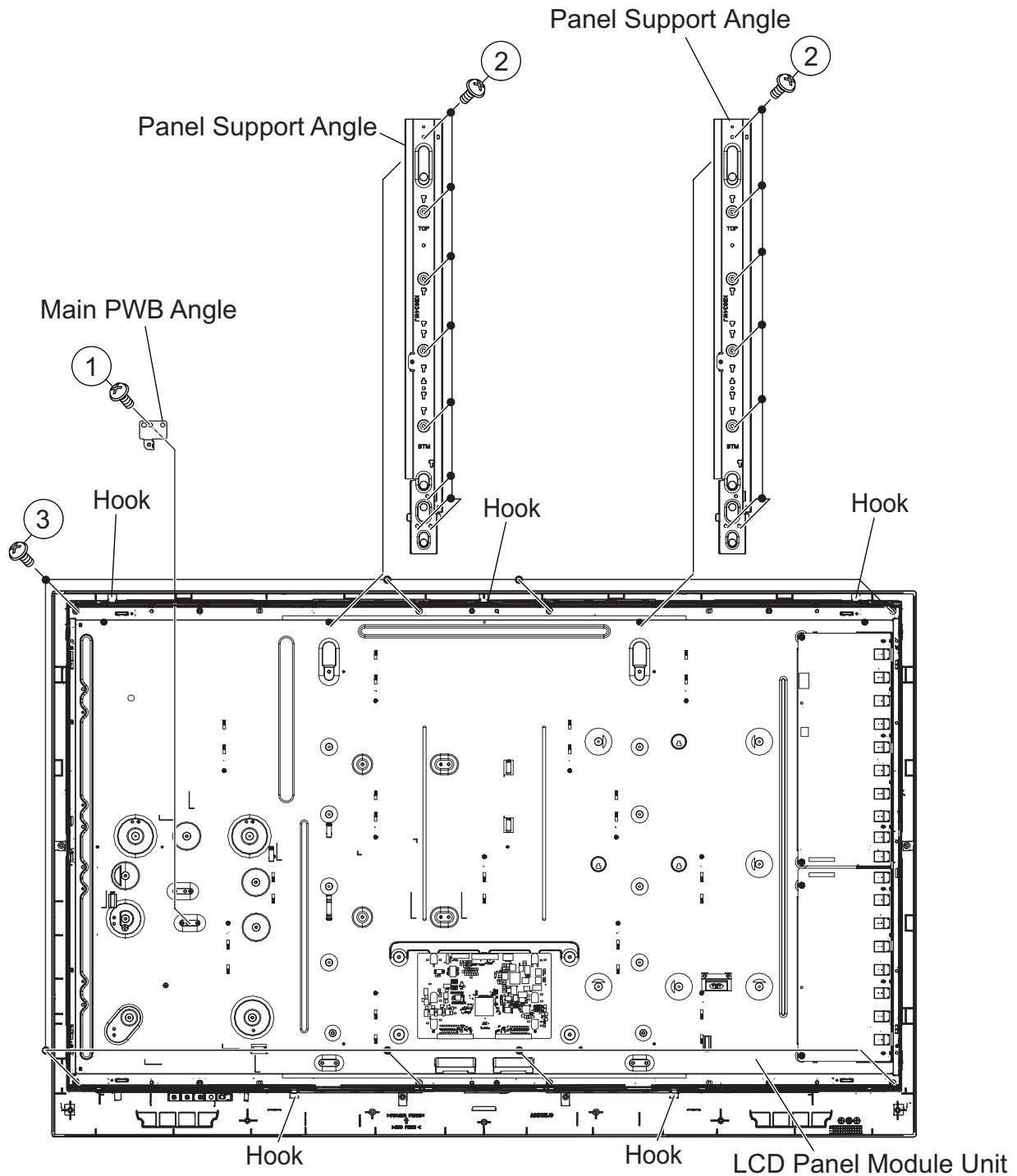
4. Removing of POWER Unit, MAIN Unit, KEY Unit Ass'y and R/C, LED Unit.

1. Remove the 6 lock screws ① and detach the POWER Unit.
2. Remove the 9 lock screws ② and detach the MAIN Unit.
3. Detach the KEY Unit Ass'y ③.
4. Detach the KEY Unit from KEY Button Cover Ass'y and disconnect KM wire ④.
5. Detach the R/C LED Unit and disconnect RA wire ⑤.



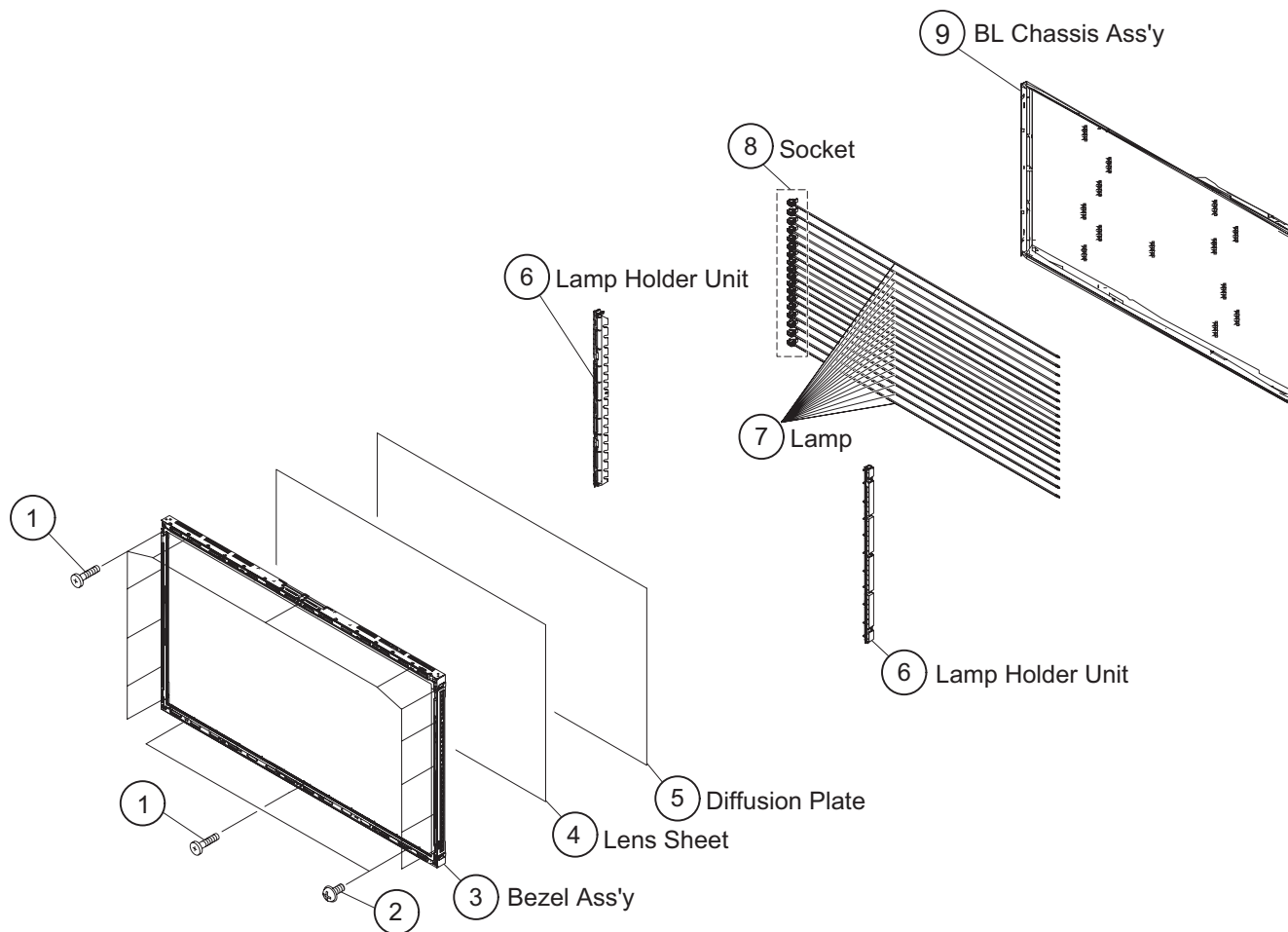
5. Removing of Main PWB Angle, Panel Support Angle and LCD Panel Module Unit.

1. Remove the 1 lock screw ① and detach the Main PWB Angle.
2. Remove the 16 lock screws ② and detach the Panel Support Angle.
3. Remove the 8 lock screws ③, 5 hooks and detach the LCD Panel Module Unit.



6. Removing of LCD Panel Module.

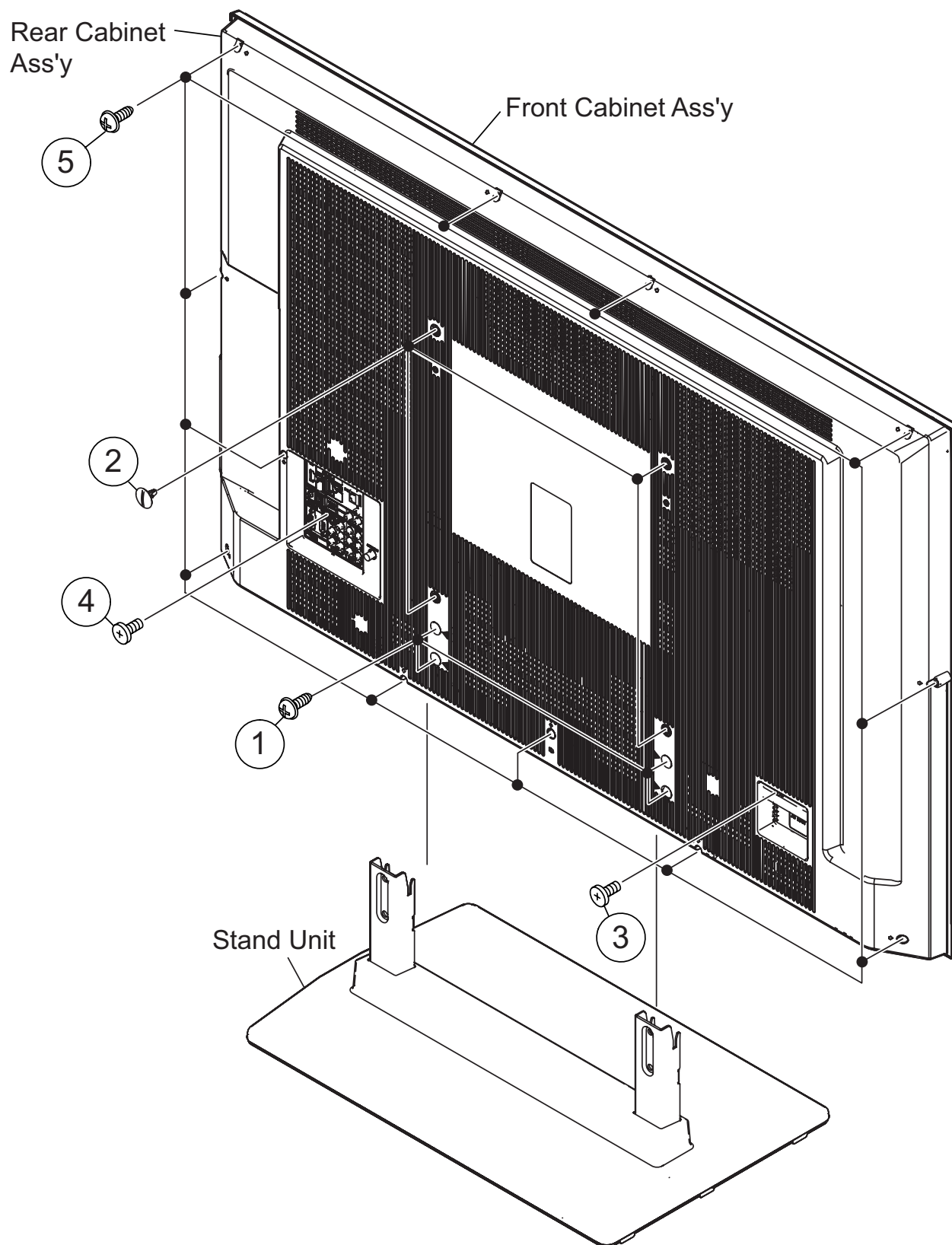
1. Remove the 14 lock screws ①, 2 lock screws ② and detach the Bezel Ass'y ③.
2. Detach the Lens Sheet ④ and Diffusion Plate ⑤.
3. Detach the 2 pieces Lamp Holder Unit ⑥, Socket ⑧ and detach the following 18 pieces Lamp ⑦ from BL Chassis Ass'y ⑨.



[2] REMOVING OF MAJOR PARTS (LC-52SB57U)

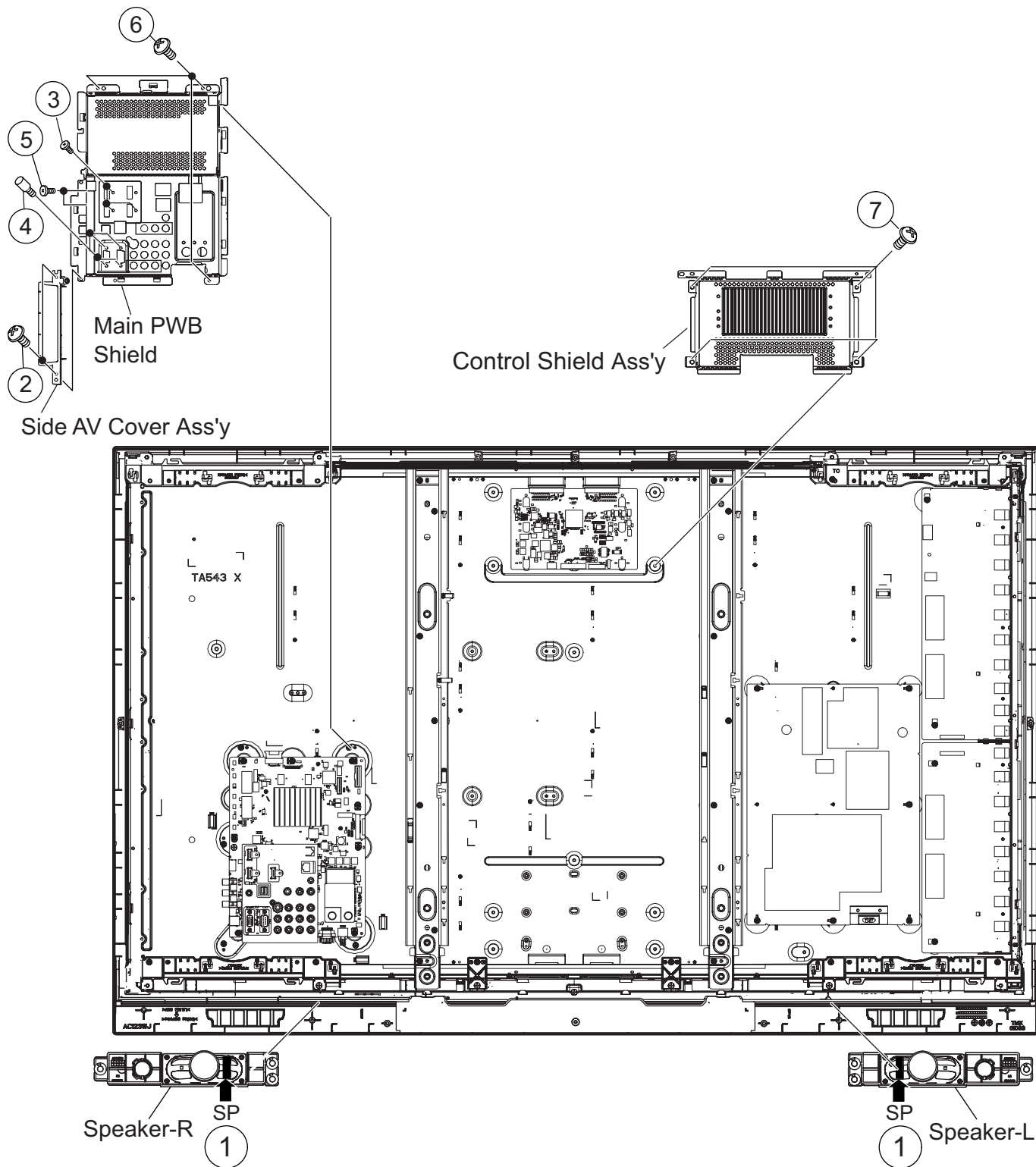
1. Removing of Stand Unit and Rear Cabinet Ass'y.

1. Remove the 4 lock screws ① and detach the Stand Unit.
2. Remove the 4 VESA Hole Covers ②.
3. Remove the 1 lock screw ③, 1 lock screw ④, 12 lock screws ⑤ and detach the Rear Cabinet Ass'y.



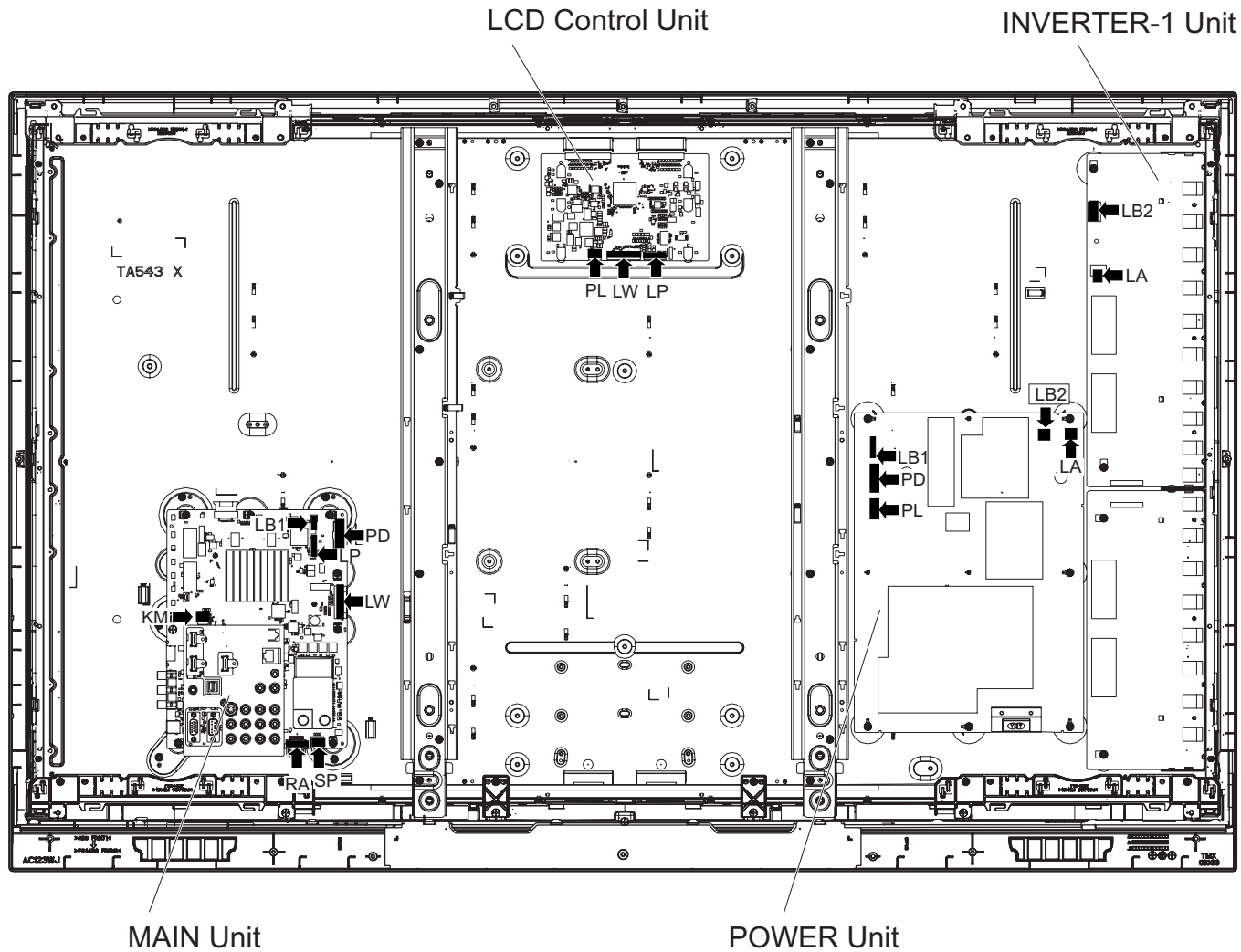
2. Removing of Speaker-L/R, Side AV Cover, Main PWB Shield and Control Shield.

1. Disconnect SP wire. Detach the Speaker-L/R ①.
2. Remove the 2 lock screws ② and detach the Side AV Cover Ass'y.
3. Remove the 3 lock screws ③, 4 lock screws ④, 2 lock screws ⑤, 3 lock screws ⑥ and detach the Main PWB Shield.
4. Remove the 4 lock screws ⑦ and detach the Control Shield Ass'y.



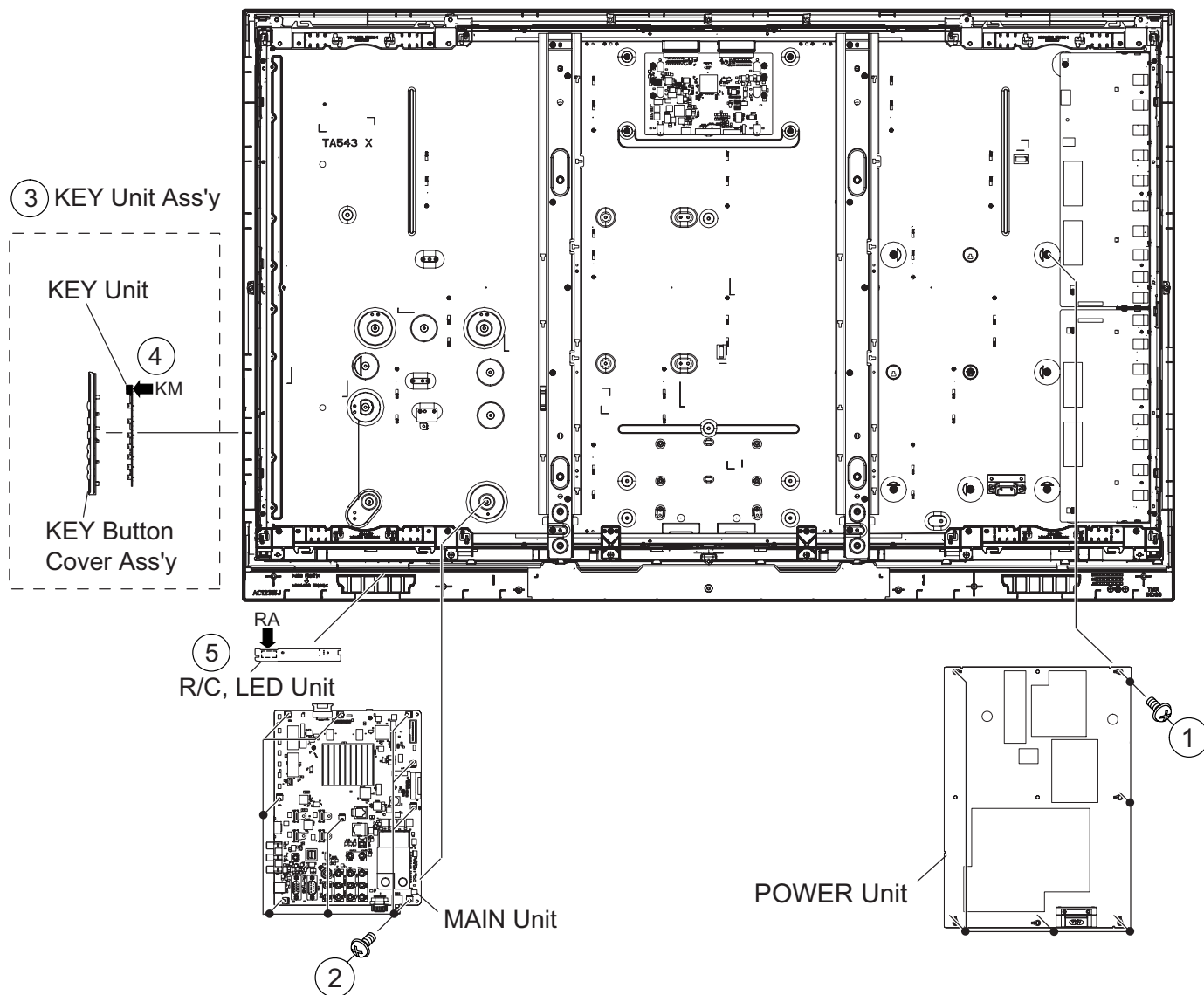
3. Removing of Connectors.

1. Disconnect the following connectors from MAIN Unit. (LB1 , LP, PD, LW, RA, KM, SP)
2. Disconnect the following connectors from POWER Unit. (LB1, PD, PL, LB2, LA)
3. Disconnect the following connectors from INVERTER-1 Unit. (LB2, LA)
4. Disconnect the following connectors from LCD Control Unit. (LP, LW, PL)



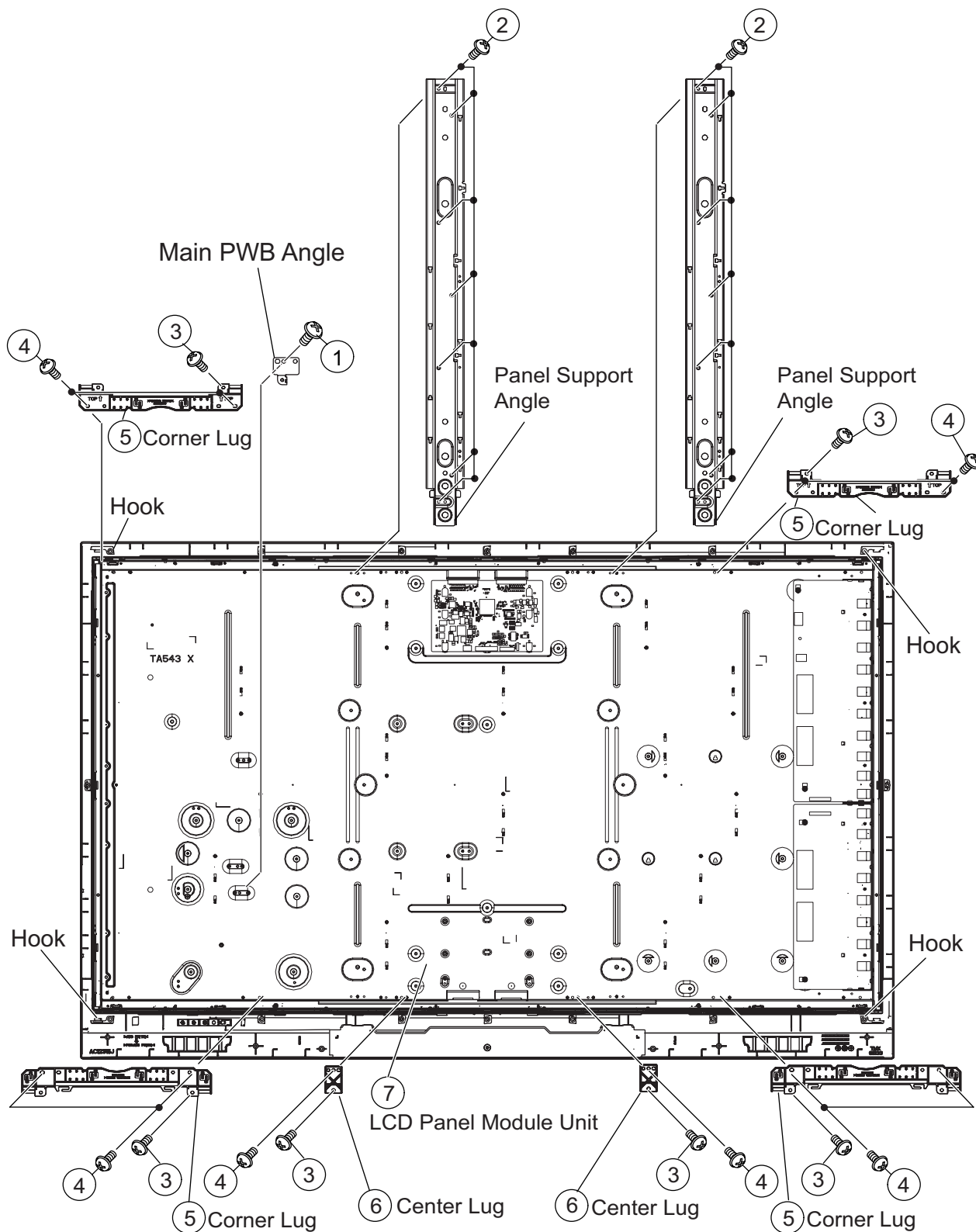
4. Removing of POWER Unit, MAIN Unit, KEY Unit Ass'y and R/C, LED Unit.

1. Remove the 6 lock screws ① and detach the POWER Unit.
2. Remove the 9 lock screws ② and detach the MAIN Unit.
3. Detach the KEY Unit Ass'y ③.
4. Detach the KEY Unit from KEY Button Cover Ass'y and disconnect KM wire ④.
5. Detach the R/C LED Unit and disconnect RA wire ⑤.



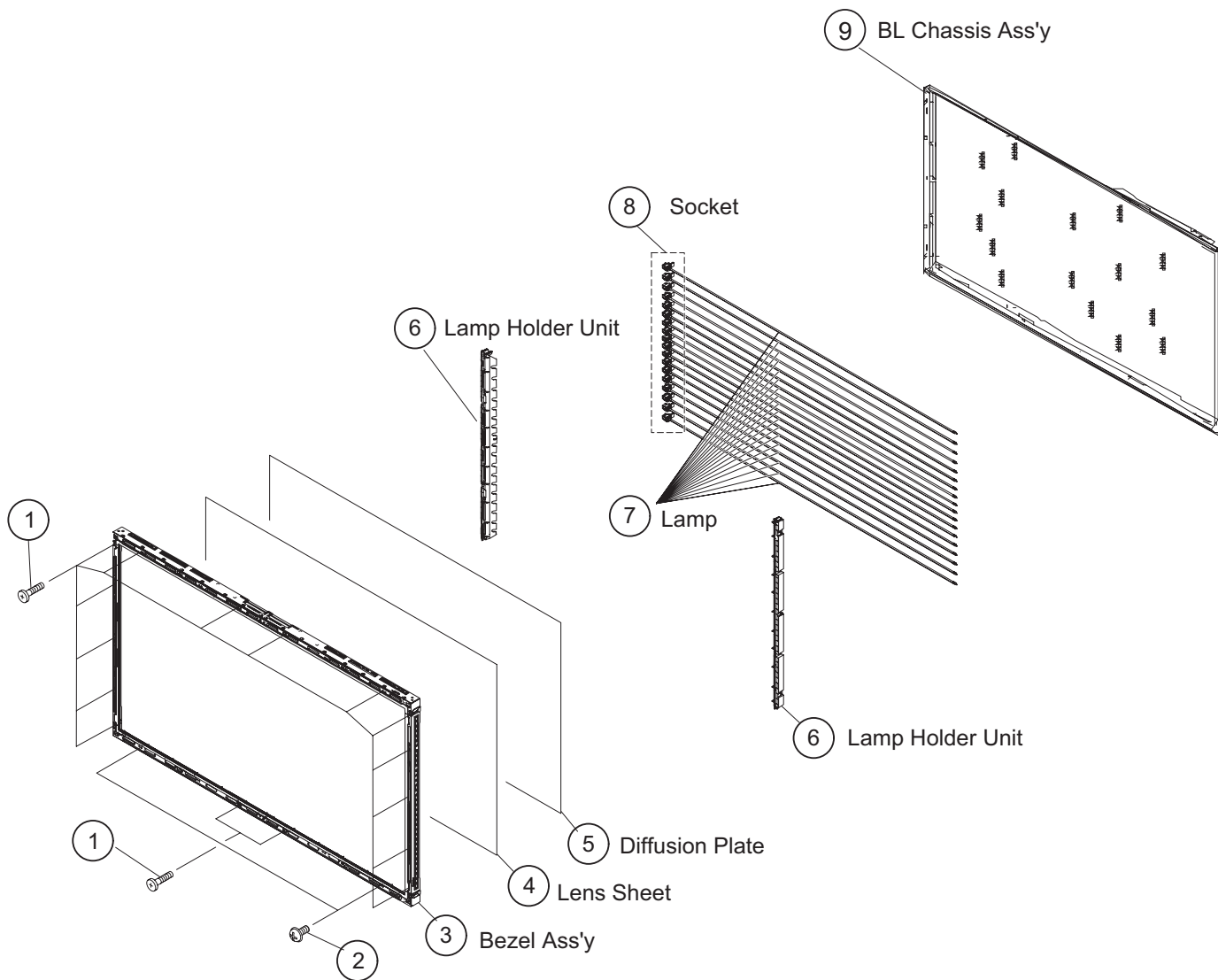
5. Removing of Main PWB Angle, Panel Support Angle, Barrier Sheet and LCD Panel Module Unit.

1. Remove the 1 lock screw ① and detach the Main PWB Angle.
2. Remove the 14 lock screws ② and detach the Panel Support Angle.
3. Remove the 6 lock screws ③, 10 lock screws ④ and detach the 4 Corner Lug ⑤ and 2 Center Lug ⑥.
4. Remove 4 hooks and detach the LCD Panel Module Unit ⑦.



6. Removing of LCD Panel Module.

1. Remove the 16 lock screws ①, 2 lock screws ② and detach the Bezel Ass'y ③.
2. Detach the Lens Sheet ④ and Diffusion Plate ⑤.
3. Detach the 2 pieces Lamp Holder Unit ⑥, Socket ⑧ and detach the following 18 pieces Lamp ⑦ from BL Chassis Ass'y ⑨.



CHAPTER 5. ADJUSTMENT

[1] ADJUSTMENT PROCEDURE

The adjustment values are set to the optimum conditions at the factory before shipping. If a value should become improper or an adjustment is required due to part replacement, make an adjustment according to the following procedure.

1. After replacement of any PWB unit and/or IC for repair, please note the following.

- When replacing the following units, make sure to prepare the new units loaded with updated software.

MAIN Unit: DUNTKE833FM05

- When replacing the LCD control PWB, perform the VCOM adjustment.

2. Upgrading of each microprocessor software

CAUTION: Never "POWER OFF" the unit when software upgrade is ongoing.

Otherwise the system may be damaged beyond recovery.

2.1. Software version upgrade

The model employs the following software.

- Main software (please use a software version after HLNAC300.USB.)
- Monitor microprocessor software (please use a software version after HLNVC03.USB and HLNAM300.BIN.)

The main software, monitor microprocessor software can be upgraded by using a general-purpose USB Memory.

The followings are the procedures for upgrading, explained separately for the main software, monitor microprocessor software.

2.2. Main software version upgrade

2.2.1 Get ready before you start

- USB Memory of 128MB or higher capacity.
- PC running on Windows 98/98SE/ME/2000/XP operating system.
- USB Memory reader/writer or PC with a USB port.
- The file system of a USB memory is FAT. (FAT32 supports)
- Use the USB memory without other functions. (lock and memory reader...etc)

2.2.2 Preparations

To upgrade the main software, it is necessary to get ready the USB Memory for version upgrade before you start.

Follow the steps below and create the USB Memory for version upgrade.

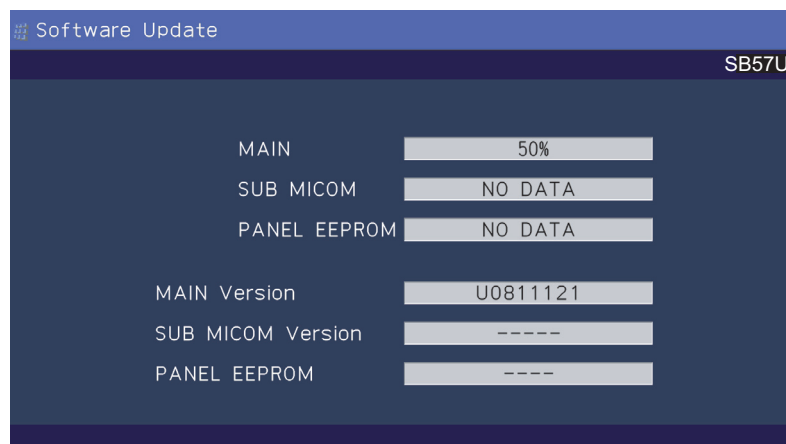
1. Copy the file HLNACxxx.USB for version upgrade to the root directory (folder) of the USB Memory.

NOTE: In the USB Memory drive, do not store other folders or unrelated files, or more than one file for version upgrade.

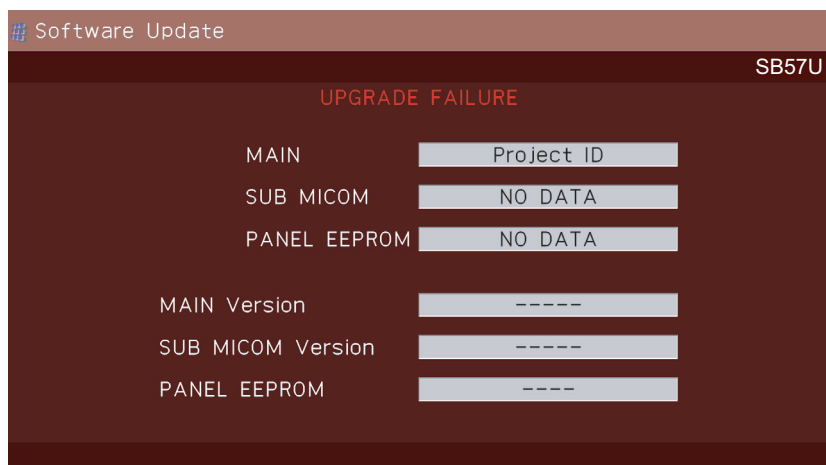
Now the USB Memory for version upgrade is ready.

2.2.3 How to upgrade the software

1. Unplug the AC cord.
2. Insert the USB Memory for version upgrade (prepared as above) into the service socket located Right side of Main Board terminals, under INPUT3 terminal.
3. Plug in the AC cord with power button pressed down after 5 seconds, unpress the power button.
4. After the unit startup, the system upgrade screen as shown below appears within 20-40 seconds.

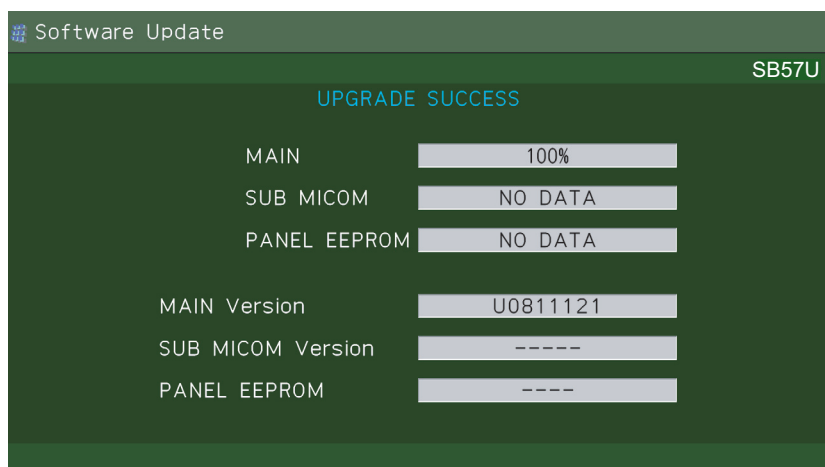


5. Even a single failure in the process will trigger the upgrade failure screen.



NOTE: In the event of a failure, repeat the upgrade process. If the process repeatedly fails, it is likely that the hardware need fixing.

6. Upon completion of the whole process, the upgrade success screen as shown below appears. You can check the new software version on this screen. The version information appears after the upgrade is complete.



7. Unplug the AC cord and remove the USB Memory for version upgrade.

8. Now the software version upgrade is complete.

NOTE: When you are done with the software version upgrade, start the set, go to the top page of the adjustment process screen and check the main software version information.

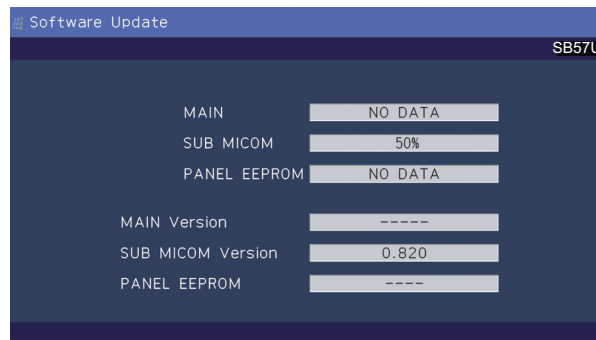
2.3. Monitor microprocessor software version upgrade

Create the USB memory for monitor microprocessor software version upgrade in the same manner as explained in the "Main software version upgrade".

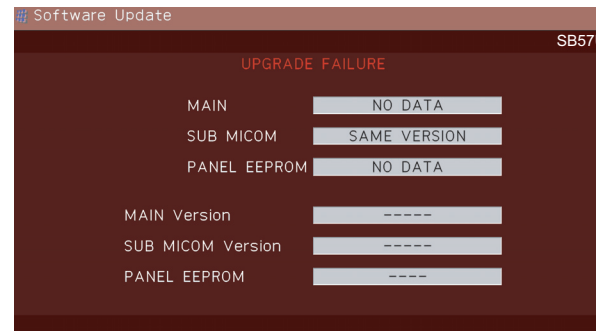
Copy the file HLNVCxx.USB and HLNAMxxx.BIN (named temporarily) for monitor microprocessor software version upgrade to the USB memory

2.3.1 How to upgrade the software

1. Unplug the AC cord.
 2. Insert the USB Memory for version upgrade (prepared as above) into the service socket located Right side of Main Board terminals, under INPUT3 terminal.
 3. Plug in the AC cord with power button pressed down.
 4. After 5 seconds, unpress the power button.
- CAUTION:
- The moment this operation is done, the upgrading of the monitor microprocessor software starts. While the upgrade is ongoing, never power off the unit. Otherwise the upgrade will fail and the system may be serious damaged beyond recovery (inability to start).
 - After the monitor microprocessor software is upgraded, also perform the 'Industry Init'.
5. After the unit startup, the upgrade starts. The power led will blink continuously. Also, an upgrade screen will be shown during a minor upgrade.

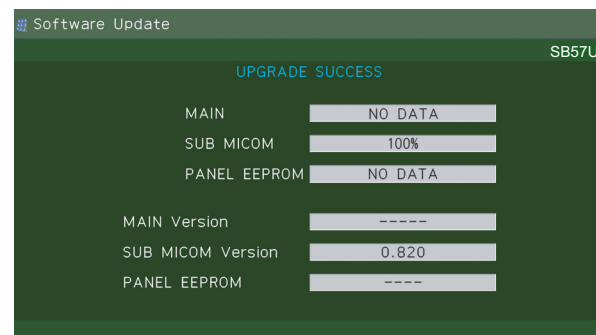


6. If the upgrade fails, power led will stop blinking. Also, the upgrade failure screen will be shown if upgrade screen was shown at 5.



NOTE: In the event of a transient failure, upgrade will be automatically retried up to three times. If the process repeatedly fails, hardware may be the cause.

7. Up on completion of the whole process, power and OPC LED will blink alternately. Also, the upgrade success screen will be shown if upgrade screen was shown at 5.



8. Unplug the AC cord and remove the USB Memory for version upgrade.
9. Now the software version upgrade is complete.

NOTE: When you are done with the software version upgrade, start the set, go to the top page of the adjustment process screen and check the monitor microprocessor software version information and panel size information.

3. Entering and exiting the adjustment process mode

- 1) Before entering the adjustment process mode, the AV position RESET in the video adjustment menu.
- 2) While holding down the "VOL (-)" and "INPUT" keys at a time, plug in the AC cord of the main unit to turn on the power.
The letter "<K>" appears on the screen.
- 3) Next, hold down the "VOL (-)" and "CH ()" keys at a time.

(The "VOL (-)" and "CH ()" keys should be pressed and held until the display appears.)

Multiple lines of blue characters appearing on the display indicate that the unit is now in the adjustment process mode.

When you fail to enter the adjustment process mode (the display is the same as normal startup), retry the procedure.

- 4) To exit the adjustment process mode after the adjustment is done, unplug the AC cord from the outlet to make a forced shutdown. (When the power was turned off with the remote controller, once unplug the AC cord and plug it again. In this case, wait 10 seconds or so before plugging.)

CAUTION: Use due care in handling the information described here lest your users should know how to enter the adjustment process mode. If the settings are tampered in this mode, unrecoverable system damage may result.

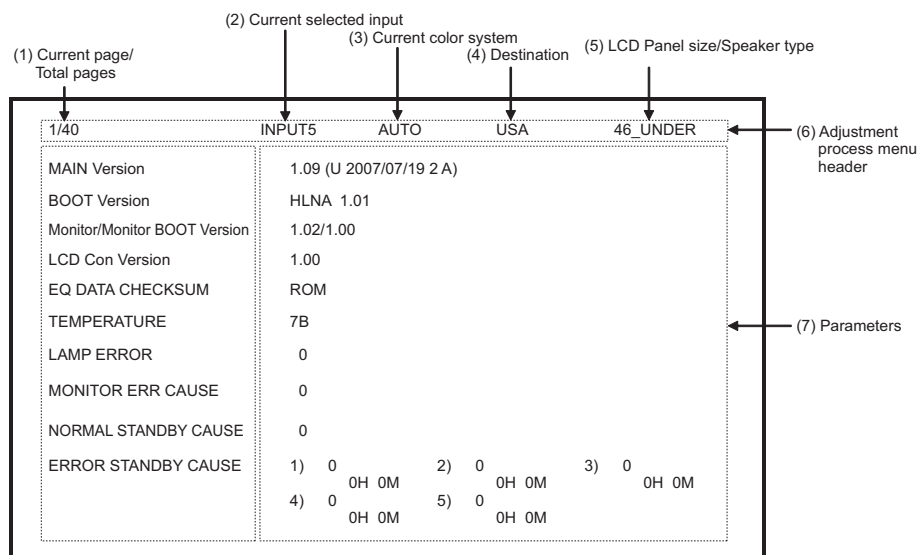
4. Remote controller key operation and description of display in adjustment process mode

- 1) Key operation

Remote controller key	Main unit key	Function
CH ( / )	CH ( / )	Moving an item (line) by one (UP/DOWN)
VOL (+/-)	VOL (+/-)	Changing a selected item setting (+1/-1)
Cursor (UP/DOWN)	_____	Turing a page (PREVIOUS/NEXT)
Cursor (LEFT/RIGHT)	_____	Changing a selected line setting (+10/-10)
INPUT	_____	Input switching (toggle switching)
ENTER	_____	Executing a function

*Input mode is switched automatically when relevant adjustment is started so far as the necessary input signal is available.

- 2) Description of display



5. List of adjustment process mode menu

The character string in brackets [] will appear as a page title in the adjustment process menu header.

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
1	1	MAIN Version	Main software version	Versions are always 'C000000000'. Refer to *1 under the list for details Refer to *2 under the list for details
	2	BOOT Version		
	3	Monitor/Monitor BOOT Version	Monitor and monitor boot software version	
	4	LCD Con Version	LCD controller software version	
	5	EQ DATA CHECKSUM	Audio data checksum	
	6	TEMPERATURE	Panel temperature	
	7	LAMP ERROR	Number of termination due to lamp error	
	8	MONITOR ERR CAUSE		
	9	NORMAL STANDBY CAUSE		
	10	ERROR STANDBY CAUSE		
2	1	INDUSTRY INIT	Initialization to factory settings	Level appears in green on the upper right
	2	INDUSTRY INIT(-Hotel)		
	3	PUBLIC MODE	Public mode	
	4	Center Acutime	Accumulated main operation time	
	5	RESET	Reset	
	6	Backlight Acutime	Accumulated monitor operation time	
	7	RESET	Reset	
	8	LAMP ERROR RESET	Reset LAMP ERROR	
	9	VIC XPOS	X-coordinate setting for VIC READ	
	10	VIC YPOS	Y-coordinate setting for VIC READ	
	11	VIC COLOR	Collected color data setting for VIC READ	
	12	VIC SIGNAL TYPE	Signal type setting for VIC READ	
	13	VIC READ	Picture level acquisition function	
3	1	N358 ALL ADJ(INPUT1)	CVBS and TUNER signal level adjustment	
	2	N358 ALL ADJ(INPUT3)		
	3	N358 MAIN ADJ(INPUT1)	CVBS signal level adjustment	
	4	N358 MAIN ADJ(INPUT3)		
	5	TUNER DAC ADJ	TUNER signal level adjustment	
	6	N358 CONTRAST A_GAIN		
	7	N358 CONTRAST D_GAIN		
	8	N358 CONTRAST OFFSET		
	9	TUNER CONTRAST A_GAIN		
	10	TUNER CONTRAST D_GAIN		
4	1	TUNER VCHIP TEST(69ch)	Tuning test and VCHIP test (69ch)	
	2	TUNER VCHIP TEST(7ch)	Tuning test and VCHIP test (7ch)	
	3	TUNER VCHIP TEST(10ch)	Tuning test and VCHIP test (10ch)	
	4	TUNER VCHIP TEST(15ch)	Tuning test and VCHIP test (15ch)	
	5	INSPECT USB TERM		
	6	HDMI CEC TEST		
5	1	COMP15K ADJ(INPUT1)	Component 15K picture level adjustment (main)	
	2	COMP15K ADJ(INPUT2)		
	3	COMP15K Y A_GAIN		
	4	COMP15K Cb A_GAIN		
	5	COMP15K Cr A_GAIN		
	6	COMP15K Y D_GAIN		
	7	COMP15K Cb D_GAIN		
	8	COMP15K Cr D_GAIN		
	9	COMP15K Y OFFSET		
	10	COMP15K Cb OFFSET		
	11	COMP15K Cr OFFSET		
6	1	COMP33K ADJ(INPUT1)	Component 33K picture level adjustment (main)	
	2	COMP33K ADJ(INPUT2)		
	3	COMP33K Y A_GAIN		
	4	COMP33K Cb A_GAIN		
	5	COMP33K Cr A_GAIN		
	6	COMP33K Y D_GAIN		
	7	COMP33K Cb D_GAIN		
	8	COMP33K Cr D_GAIN		
	9	COMP33K Y OFFSET		
	10	COMP33K Cb OFFSET		
	11	COMP33K Cr OFFSET		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
7	1	ANALOG RGB ADJ	Analog RGB picture level adjustment	
	2	R A_GAIN		
	3	G A_GAIN		
	4	B A_GAIN		
	5	R D_GAIN		
	6	G D_GAIN		
	7	B D_GAIN		
	8	R OFFSET		
	9	G OFFSET		
	10	B OFFSET		
8	1	VCOM ADJ	VCOM adjustment value	
9	1	FRC ON/OFF	Standard value 1 Standard value 2 Standard value 3 Standard value 4 Standard value 5 Standard value 6	Adjustment gradation setting.
	2	LEV1		
	3	LEV2		
	4	LEV3		
	5	LEV4		
	6	LEV5		
	7	LEV6		
10	1	MG1R	WB adjustment Point 1, R adjustment value	Parameter for six-point adjustment
	2	MG1G	WB adjustment Point 1, G adjustment value	
	3	MG1B	WB adjustment Point 1, B adjustment value	
	4	MG2R	WB adjustment Point 2, R adjustment value	
	5	MG2G	WB adjustment Point 2, G adjustment value	
	6	MG2B	WB adjustment Point 2, B adjustment value	
	7	MG3R	WB adjustment Point 3, R adjustment value	
	8	MG3G	WB adjustment Point 3, G adjustment value	
	9	MG3B	WB adjustment Point 3, B adjustment value	
11	1	MG4R	WB adjustment Point 4, R adjustment value	Parameter for six-point adjustment
	2	MG4G	WB adjustment Point 4, G adjustment value	
	3	MG4B	WB adjustment Point 4, B adjustment value	
	4	MG5R	WB adjustment Point 5, R adjustment value	
	5	MG5G	WB adjustment Point 5, G adjustment value	
	6	MG5B	WB adjustment Point 5, B adjustment value	
	7	MG6R	WB adjustment Point 6, R adjustment value	
	8	MG6G	WB adjustment Point 6, G adjustment value	
	9	MG6B	WB adjustment Point 6, B adjustment value	
12	1	MODE SELECT		
	2	POS SELECT		
	3	POS MIN		
	4	POS MID1		
	5	POS MID2		
	6	POS MID3		
	7	POS MID4		
	8	POS MID5		
	9	POS MID6		
	10	POS MAX		
13	1	CD MIN		
	2	CD MID1		
	3	CD MID2		
	4	CD MID3		
	5	CD MID4		
	6	CD MID5		
	7	CD MID6		
	8	CD MAX		
14	1	CALC		
	2	RESET		
	3	VAL1		
	4	VAL2		
	5	VAL3		
	6	VAL4		
	7	VAL5		
	8	VAL6		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
15	1	Audio Switch		
	2	Flat Mode		
	3	ADC Volume 1		
	4	ADC Volume 2		
	5	ADC Volume 3		
	6	ADC Volume 4		
	7	ADC Volume 5		
	8	ADC Volume 6		
16	1	Lip Sync LR		
	2	Lip Sync Monitor		
	3	Lip Sync SW		
	4	LR Func Vol AIN(2ch)		
	5	LR Func Vol HDMI(2ch)		
	6	LR Func Vol ATV(2ch)		
	7	LR Func Vol DTV(2ch)		
	8	Input Trim(2ch)		
17	1	PEQ1 F0		
	2	PEQ1 Q		
	3	PEQ1 Gain		
	4	PEQ1 Gain Limit		
	5	PEQ1 Fade Time		
	6	PEQ2 F0		
	7	PEQ2 Q		
	8	PEQ2 Gain		
	9	PEQ2 Gain Limit		
	10	PEQ2 Fade Time		
18	1	PEQ3 F0		
	2	PEQ3 Q		
	3	PEQ3 Gain		
	4	PEQ3 Gain Limit		
	5	PEQ3 Fade Time		
	6	PEQ4 F0		
	7	PEQ4 Q		
	8	PEQ4 Gain		
	9	PEQ4 Gain Limit		
	10	PEQ4 Fade Time		
19	1	PEQ5 F0		
	2	PEQ5 Q		
	3	PEQ5 Gain		
	4	PEQ5 Gain Limit		
	5	PEQ5 Fade Time		
	6	PEQ6 F0		
	7	PEQ6 Q		
	8	PEQ6 Gain		
	9	PEQ6 Gain Limit		
	10	PEQ6 Fade Time		
20	1	PEQ7 F0		
	2	PEQ7 Q		
	3	PEQ7 Gain		
	4	PEQ7 Gain Limit		
	5	PEQ7 Fade Time		
	6	Subsonic Filter		
21	1	Output Trim		
	2	Clipper		
	3	Sub Volume Default		
	4	Sub Volume SH Bass		
	5	Mon Func Vol AIN		
	6	Mon Func Vol HDMI		
	7	Mon Func Vol ATV		
	8	Mon Func Vol DTV		
	9	SW Func Vol AIN		
	10	SW Func Vol HDMI		
	11	SW Func Vol ATV		
	12	SW Func Vol DTV		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
22	1	BE ATT		
	2	BE G Limit		
	3	Bass Center ATT		
	4	Bass Vol0 MIN		
	5	Bass Vol60 MIN		
	6	Bass Vol60 Center		
	7	Bass Vol0 MAX		
	8	Bass Vol60 MAX		
23	1	Treble Center ATT		
	2	Treble Vol0 MIN		
	3	Treble Vol60 MIN		
	4	Treble Vol60 Center		
	5	Treble Vol0 MAX		
	6	Treble Vol60 MAX		
	7	VS Path		
	8	VS Option		
	9	VS SP Interval		
	10	VS Width		
	11	VS Input Gain(2ch)		
24	1	Bass AGC		
	2	Bass Harmonics		
	3	Bass LPF Fc		
	4	Bass HPF Fc		
	5	Bass AGC Max		
	6	Bass AGC Min		
	7	Bass AGC Attack Time		
	8	Bass AGC Release Time		
	9	Bass AGC Threshold		
	10	Bass AGC HPF F0		
	11	Bass Harmonics Level		
	12	Bass Harmonics LPF F		
	13	Bass Harmonics HPF F		
25	1	PANNEL SELECT		
	2	PWM		
	3	PWM FREQ		
	4	PWM DUTY		
	5	OSC FREQ		
	6	OSC DUTY		
26	1	BRIGHTNESS DA0		
	2	BRIGHTNESS DA1		
	3	BRIGHTNESS DA2		
	4	BRIGHTNESS DA3		
	5	BRIGHTNESS DA4		
	6	BRIGHTNESS DA5		
	7	BRIGHTNESS DA6		
	8	BRIGHTNESS DA7		
	9	BRIGHTNESS DA8		
	10	BRIGHTNESS DA9		
	11	BRIGHTNESS DA10		
	12	BRIGHTNESS DA11		
27	1	BRIGHTNESS DA12		
	2	BRIGHTNESS DA13		
	3	BRIGHTNESS DA14		
	4	BRIGHTNESS DA15		
	5	BRIGHTNESS DA16		
	6	BRIGHTNESS DA17		
	7	BRIGHTNESS DA18		
	8	BRIGHTNESS DA19		
	9	BRIGHTNESS DA20		
	10	BRIGHTNESS DA21		
	11	BRIGHTNESS DA22		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
28	1	BRIGHTNESS DA23		
	2	BRIGHTNESS DA24		
	3	BRIGHTNESS DA25		
	4	BRIGHTNESS DA26		
	5	BRIGHTNESS DA27		
	6	BRIGHTNESS DA28		
	7	BRIGHTNESS DA29		
	8	BRIGHTNESS DA30		
	9	BRIGHTNESS DA31		
	10	BRIGHTNESS DA32		
29	1	OPC33 ADLEVEL 0		
	2	OPC33 ADLEVEL 1		
	3	OPC33 ADLEVEL 2		
	4	OPC33 ADLEVEL 3		
	5	OPC33 ADLEVEL 4		
	6	OPC33 ADLEVEL 5		
	7	OPC33 ADLEVEL 6		
	8	OPC33 ADLEVEL 7		
	9	OPC33 ADLEVEL 8		
	10	OPC33 ADLEVEL 9		
	11	OPC33 ADLEVEL 10		
	12	OPC33 ADLEVEL 11		
30	1	OPC33 ADLEVEL 12		
	2	OPC33 ADLEVEL 13		
	3	OPC33 ADLEVEL 14		
	4	OPC33 ADLEVEL 15		
	5	OPC33 ADLEVEL 16		
	6	OPC33 ADLEVEL 17		
	7	OPC33 ADLEVEL 18		
	8	OPC33 ADLEVEL 19		
	9	OPC33 ADLEVEL 20		
	10	OPC33 ADLEVEL 21		
	11	OPC33 ADLEVEL 22		
31	1	OPC33 ADLEVEL 23		
	2	OPC33 ADLEVEL 24		
	3	OPC33 ADLEVEL 25		
	4	OPC33 ADLEVEL 26		
	5	OPC33 ADLEVEL 27		
	6	OPC33 ADLEVEL 28		
	7	OPC33 ADLEVEL 29		
	8	OPC33 ADLEVEL 30		
	9	OPC33 ADLEVEL 31		
32	1	V6 OS THERMO 1		
	2	V6 OS THERMO 2		
	3	V6 OS THERMO 3		
	4	V6 OS THERMO 4		
	5	V6 OS THERMO 5		
	6	V6 OS THERMO 6		
	7	V6 OS THERMO 7		
33	1	V5 OS THERMO 1		
	2	V5 OS THERMO 2		
	3	V5 OS THERMO 3		
	4	V5 OS THERMO 4		
	5	V5 OS THERMO 5		
	6	V5 OS THERMO 6		
	7	V5 OS THERMO 7		
34	1	BL TEMP1		
	2	BL TEMP2		
	3	BL TDUTY		
35	1	MONITOR TIME OUT		
	2	MONITOR MAX TEMP		
	3	MONITOR ERROR CAUSE RESET		

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
36	1	LCD TEST PATTERN		
	2	TV TEST PATTERN 1		
	3	TV TEST PATTERN 2		
37	1	KEY LOCK(1217)		
	2	KOUTEI AREA ALL CLEAR		
	3	A MODE AREA CLEAR		
	4	BACKUP AREA CLEAR		
	5	B MODE AREA CLEAR		
	6	EXECUTION		
38	1	READ/WRITE		
	2	SLAVE ADDRESS		
	3	REGISTER ADDRESS UPPER		
	4	REGISTER ADDRESS LOWER		
	5	WRITE DATA UPPER		
	6	WRITE DATA LOWER		
	7	READ DATA UPPER		
	8	READ DATA LOWER		
39	1	EEP SAVE	Writing setting values to EEPROM	
	2	EEP RECOVER	Reading setting values from EEPROM	
	3	STANDBY CAUSE RESET	Reset stand by cause	
	4	SETTING FOR ADJ		
40	1	BD UNIT FACTORY MENU		

***1 Details of P1.9 (NORMAL STANDBY CAUSE)**

2	No operation off	in the cause of "no operation off"
3	No signal off	in the cause of "no signal off"
4	PC power management mode 1	in the cause of "Standby mode MODE1"
5	PC power management mode 2	in the cause of "Standby mode MODE2"
6	Off timer	in the cause of "SLEEP timer"
8	Command from RS232C	in the cause of command by RS-232C

***2 Details of P1.10 (ERROR STANDBY CAUSE)**

11	Prolonged unspecified-signal input in PC mode	in the cause of continuous "out of range", PC input mode
17	Temperature error	in the cause of abnormal temperature
1A	Monitor trouble detected	in the cause of abnormal monitor mode
22	LCD controller Rom error	in the cause of software abnormality of LCD controller

6. Special features

* STANDBY CAUSE (Page 1/40)

Display of a cause (code) of the last standby

The cause of the last standby is recorded in EEPROM whenever possible.

Checking this code will be useful in finding a problem when you repair the troubled set.

* EEP SAVE (Page 39/40)

Storage of EEP adjustment value

* EEP RECOVER (Page 39/40)

Retrieval of EEP adjustment value from storage area

7. Video signal adjustment procedure

*Adjustment process mode menu is listed in section 5.

7.1. Signal check

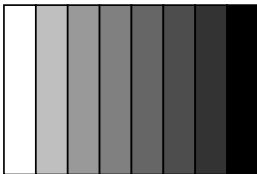
Signal generator level adjustment check (Adjustment to the specified level)

- Composite signal : 0.714Vp-p $\pm$ 0.02Vp-p (Pedestal to white level)
- 15K component signal : Y level : 0.714Vp-p $\pm$ 0.02Vp-p (Pedestal to white level)
PB, PR level : 0.7Vp-p $\pm$ 0.02Vp-p
- 33K component signal : Y level : 0.7Vp-p $\pm$ 0.02Vp-p (Pedestal to white level)
PB, PR level : 0.7Vp-p $\pm$ 0.02Vp-p
- Analog RGB : RGB level : 0.7Vp-p $\pm$ 0.02Vp-p (Pedestal to white level)

7.2. Entering the adjustment process mode

Enter the adjustment process mode according to the steps described in section 3.

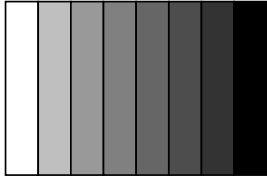
7.3. N358 composite signal adjustment (Tuner)

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Adjustment	N358 signal US-10ch	Feed the NTSC (3.58) split field color bar signal (75% color saturation) to VIDEO 1 input. Feed the RF signal (by use of US-10ch) to TUNER-A. [Video input signal]  ↑ 100% white [US-10CH]  ↑ 100% white
2	Auto adjustment performance	Page 3/40	Bring the cursor on [●N358 ALL ADJ (INPUT1)] and press [ENTER]. [●N358 ALL ADJ (INPUT1) OK] appears when finished.

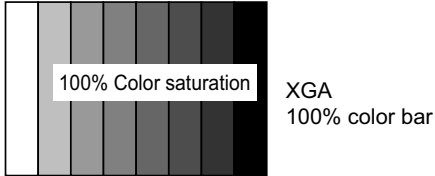
7.4. Component 15K signal adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Adjustment	480i signal	Feed the 100% color bar signal to INPUT 1 component input.  ↑ 100% white
2	Auto adjustment performance	Page 5/40	Bring the cursor on [●COMP 15K ADJ (INPUT1)] and press [ENTER]. [●COMP 15K ADJ (INPUT1) OK] appears when finished.

7.5. Component 33K signal adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Adjustment	1080i signal	Feed the 100% color bar signal to INPUT 1 component input.  ↑ 100% white
2	Auto adjustment performance	Page 6/40	Bring the cursor on [●COMP 33K ADJ (INPUT1)] and press [ENTER]. [●COMP 33K ADJ (INPUT1) OK] appears when finished.

7.6. Analog RGB signal adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Adjustment	Analog RGB signal: XGA (1024 x 768) 60Hz SYNC: HV separate	Feed the XGA 100% color bar signal to ANALOG RGB input.  ↑ 100% white ↑ 0% black
2	Auto adjustment performance		Bring the cursor on [●ANALOG RGB ADJ] and press [ENTER]. [●ANALOG RGB ADJ OK] appears when finished.

7.7. Tuner/V-Chip test

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Adjustment	NTSC RF signal US-7 (AIR) ch	Feed the NTSC signal to RF ANTENNA input.
2	Auto adjustment performance		Bring the cursor on [●TUNER VCHIP TEST (*07ch)] and press [ENTER]. (*Select the channel according to the RF signal.) [●A-OK (***)/VM-OK] appears in blue when finished. (If [A-NG/VM-NG] appears in yellow or red, the test is incomplete.) Make sure a displacement of ± 0.0625 MHz from the center frequency is acceptable.

8. Adjustment of white balance

8.1. White balance adjustment

	Adjustment item	Adjustment conditions	Adjustment procedure																																														
1	Setting		For detailed adjustment procedure, refer to “Kameyama Model Integral Monitor WB Adjustment Specifications V1.6”. 1) Make the following settings for the set. AV MODE: [DYNAMIC] Backlight: +16 Active Backlight: OFF Aging time: Min. 60 minutes 2) Connect the white balance adjustment tool to the set.																																														
2	Automatic adjustment execution	[Command] Process mode KRSW0001 KKT10037 Setting KYOF0000 OSDS0001 SBSL0016 Multi-point adjustment mode MSET0001 Point 6 WBI60928 MG6G**** MG6B**** MG6R**** Point 5 WBI50784 MG5G**** MG5B**** MG5R**** Point 4 WBI40580 MG4G**** MG4B**** MG4R**** Point 3 WBI30420 MG3G**** MG3B**** MG3R**** Point 2 WBI20284 MG2G**** MG2B**** MG2R**** Point 1 WBI10184 MG1G**** MG1B**** MG1R**** Writing MSET0003	[Adjustment procedure] 1) Using the remote controller, transmit the “monitor adjustment process” code. 2) Set the 6th point to the specified gradation level. With the strongest color being fixed, turn down the R, G and B settings to their reference levels. 3) Set the 5th point to the specified gradation level. Correct the G setting (3136 x 6th-point G setting / 3712) (rounded off), and make the R and B settings to their reference levels. 4) Set the 4th point to the specified gradation level. Correct the G setting (2320 x 6th-point G setting / 3712) (rounded off), and make the R and B settings to their reference levels. 5) Set the 3rd point to the specified gradation level. Correct the G setting (1680 x 6th-point G setting / 3712) (rounded off), and make the R and B settings to their reference levels. 6) Set the 2nd point to the specified gradation level. Correct the G setting (1136x 6th-point G setting / 3712) (rounded off), and make the R and B settings to their reference levels. 7) Set the 1st point to the specified gradation level. Correct the G setting (736 x 6th-point G setting / 3712) (rounded off), and make the R and B settings to their reference levels. 8) With the MSET0003 command, write the adjustment values and turn off the AC power. * Initial R, G and B settings at point 6: Gradation level set at 3712 * Initial R, G and B settings at points 1 thru 5: Corrected G setting at each point (This is because the adjustment is made to achieve the same remainder of RGB setting / 4 at each point.) [Adjustment value] •As per the “standard set” submitted by Engineering Department Teaching set [Adjustment reference] Instrument: Minolta CA-210 Engineering instrument <table><tr><th></th><th>Level</th><th>Reference</th><th>Adj. spec</th><th>Ins. spec</th></tr><tr><td rowspan="2">Point 6</td><td rowspan="2">928</td><td>X=0.272</td><td rowspan="2">±0.0010</td><td rowspan="2">±0.0020</td></tr><tr><td>y=0.277</td></tr><tr><td rowspan="2">Point 5</td><td rowspan="2">784</td><td>X=0.272</td><td rowspan="2">±0.0010</td><td rowspan="2">±0.0020</td></tr><tr><td>y=0.277</td></tr><tr><td rowspan="2">Point 4</td><td rowspan="2">580</td><td>X=0.272</td><td rowspan="2">±0.0015</td><td rowspan="2">±0.0030</td></tr><tr><td>y=0.277</td></tr><tr><td rowspan="2">Point 3</td><td rowspan="2">420</td><td>X=0.272</td><td rowspan="2">±0.0020</td><td rowspan="2">±0.0040</td></tr><tr><td>y=0.277</td></tr><tr><td rowspan="2">Point 2</td><td rowspan="2">284</td><td>X=0.272</td><td rowspan="2">±0.0030</td><td rowspan="2">±0.0060</td></tr><tr><td>y=0.277</td></tr><tr><td rowspan="2">Point 1</td><td rowspan="2">184</td><td>X=0.272</td><td rowspan="2">±0.0040</td><td rowspan="2">±0.0080</td></tr><tr><td>y=0.277</td></tr><tr><td>Note</td><td></td><td colspan="3">Set conditions for inspection AV MODE: [DYNAMIC] (Reset) Monochro: ON Active Contrast: OFF Aging Time: Min. 60 minutes</td></tr></table>		Level	Reference	Adj. spec	Ins. spec	Point 6	928	X=0.272	±0.0010	±0.0020	y=0.277	Point 5	784	X=0.272	±0.0010	±0.0020	y=0.277	Point 4	580	X=0.272	±0.0015	±0.0030	y=0.277	Point 3	420	X=0.272	±0.0020	±0.0040	y=0.277	Point 2	284	X=0.272	±0.0030	±0.0060	y=0.277	Point 1	184	X=0.272	±0.0040	±0.0080	y=0.277	Note		Set conditions for inspection AV MODE: [DYNAMIC] (Reset) Monochro: ON Active Contrast: OFF Aging Time: Min. 60 minutes		
	Level	Reference	Adj. spec	Ins. spec																																													
Point 6	928	X=0.272	±0.0010	±0.0020																																													
		y=0.277																																															
Point 5	784	X=0.272	±0.0010	±0.0020																																													
		y=0.277																																															
Point 4	580	X=0.272	±0.0015	±0.0030																																													
		y=0.277																																															
Point 3	420	X=0.272	±0.0020	±0.0040																																													
		y=0.277																																															
Point 2	284	X=0.272	±0.0030	±0.0060																																													
		y=0.277																																															
Point 1	184	X=0.272	±0.0040	±0.0080																																													
		y=0.277																																															
Note		Set conditions for inspection AV MODE: [DYNAMIC] (Reset) Monochro: ON Active Contrast: OFF Aging Time: Min. 60 minutes																																															

8.2. Adjusting procedure by use of [RS-232C]

1. Get ready the PC with COM port (RS-232C) running on Windows 95/98/ME/2000/XP operating system, as well as the RS-232C cross cable.
2. Start the unit with the RS-232C cable connected.
3. Start the terminal software. (The freeware readily available on the Internet will do.)
4. Make the following settings.

Baud rate	9,600 bps
Data LENGTH	8 bit
Parity bit	None
Stop bit	1 bit
Flow control	None

5. If the settings are correct, the terminal software indicates "ERR" against pressing of the "ENTER" key.
6. After the settings are done correctly, it is possible to make an adjustment by typing in the command shown in the table below and pressing the "ENTER" key on the keyboard.
7. Command entry is successful if the terminal software indicates "OK" when the "ENTER" is pressed. If "ERR" is shown, retry to enter the command.
8. Send the process mode switching command to switch from the RS232C operation mode to the process mode.
KRSW0001: "ERR" is returned.
KKT10037: When "OK" is returned, the process mode becomes active. When "ERR", start over from KRSW0001.
9. Send each adjustment command.

9. Initialization to factory settings

CAUTION: When initialization is performed, all user setting data including the channel settings are initialized. Be cautious when making this adjustment.

(The adjustments done in the adjustment process mode are not initialized.)

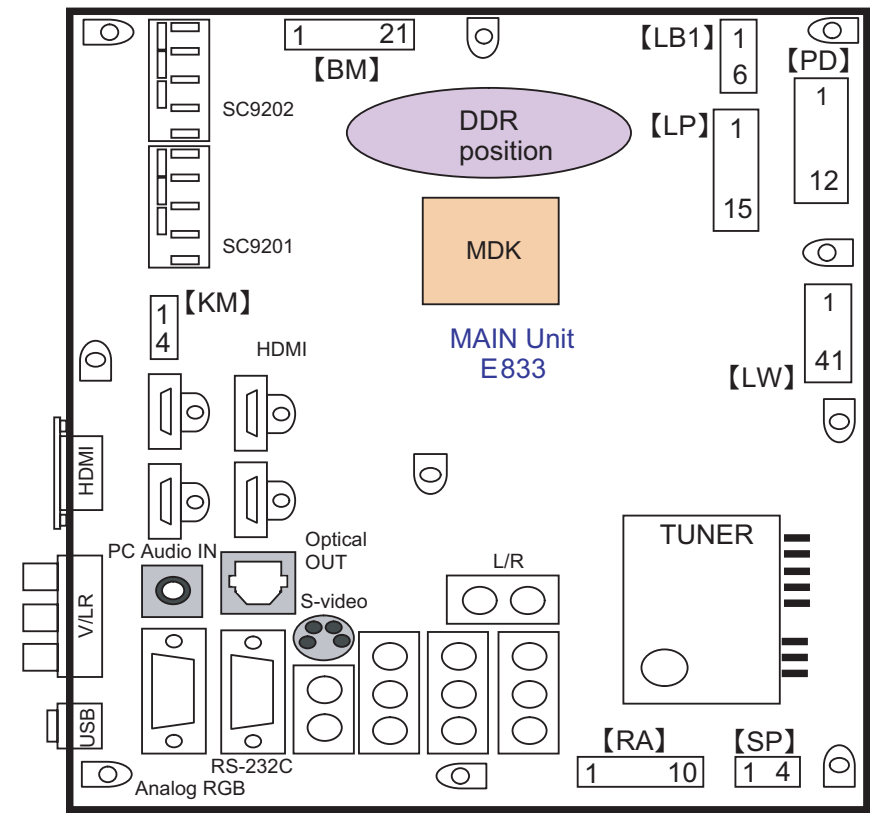
	Adjustment item	Adjustment conditions	Adjustment procedure
1	Initialization	It turns off with AC power supply.	Enter the adjustment process mode. Bring the cursor on to [INDUSTRY INIT] in page 2/40. Set to [ON] using [VOL] key, and press [ENTER] to execute the initialization. When the version number screen shows up on the green background and "SUCCESS" gets displayed at the top on screen, it means the procedure has been successfully carried out. (If an error occurs, "ERROR" is displayed on the red background.) •Turn off the AC power. *Never shut off the power during the initialization process. The following settings are initialized in this adjustment. 1) User setting 2) Channel data (e.g. broadcast frequencies) 3) Password data 4) Operation time 5) Auto installation flag 6) V-CHIP block setting

After the adjustment, cancel the adjustment process mode.

To exit the adjustment process mode, unplug the AC power cable from the outlet to make a forced shutdown. (When the power was turned off with the remote controller, once unplug the power cable and plug it again. In this case, wait 10 seconds or so before plugging.)

10. Model number ID plug

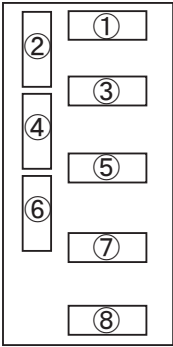
Model numbers are identified by inserting the destination ID plug (QCNCMA275WJQZ) in its specified slot of the destination ID connector SC9201/SC9202 (QCNCWA715WJQZY).



Destination ID connector locations

	SC9201	SC9202
LC-46SB57U	③	⑦
LC-52SB57U	⑤	⑦

Plug locations

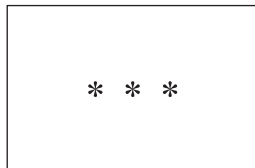
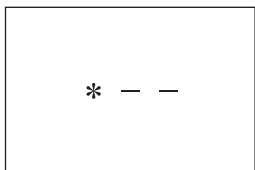
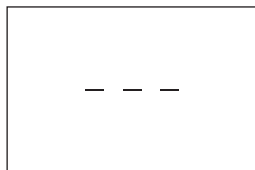


[2] PUBLIC MODE SETTING PROCEDURE

1. How to start Public Mode

- There are the following two ways to get the public mode setup screen displayed.

- ① In the adjustment process mode, turn on "PUBLIC MODE". Also press the "CH ()" and "VOL (+)" keys on the set at once and turn on the power.
- ② 1) Press the "INPUT" and "VOL (+)" keys on the set at once and turn on the power.
2) Get the password input screen displayed.



Procedure

- The input starts with the leftmost digit.
- Use the numeric keys [1] thru [9] and [0] keys on the remote controller.
The other keys are not acceptable.
- With a numeric-key input, "-" will change to "*".
The input position will move one digit to the right.
- With all the 3 digits entered, the password will be verified.

- 3) The 3-digit password is now verified.

The password [0] [2] [7] provides for the public mode screen. (This screen comes on with whatever adjustment process settings.)

With any other passwords, the screen changes to the normal mode.

2. How to exit Public Mode

There are the following ways to quit the public mode setup screen.

- Turn off "PUBLIC MODE" in the adjustment process mode. (☆) ← This way alone is not for quitting the setup screen, but for quitting the mode itself.
- Turn off the power with the "POWER" key. (★)
- Select "EXECUTE". (★)
- ★ ... "PUBLIC MODE" stays on in the adjustment process mode.
- ☆ ... The settings will be back to the factory ones.

3. Public Mode Setting Values

- With the factory settings made, the public mode settings get initialized. (The adjustment process remains intact.)

4. Public Mode Menu

The guidance is not displayed on screen.

Setup procedure

- To move the cursor up and down, use the “cursor UP/DOWN” key (remote controller) and “CH ()/()” key (remote controller and set).
- To change the settings, use the “cursor RIGHT/LEFT” key (remote controller) and “VOL (+)/(-)” key (remote controller and set).
- To save new settings, keep the cursor at “EXECUTE” and use “ENTER” key (remote controller and set).

PUBLIC MODE	
POWER ON FIXED	[VARIABLE]
MAXIMUM VOLUME	[60]
VOLUME FIXED	[VARIABLE]
VOLUME FIXED LEVEL	[20]
RC BUTTON	[RESPOND]
PANEL BUTTON	[RESPOND]
MENU BUTTON	[RESPOND]
AV POSITION FIXED	[VARIABLE]
ON SCREEN DISPLAY	[YES]
INPUT MODE START	[NORMAL]
INPUT MODE FIXED	[VARIABLE]
LOUD SPEAKER	[ON]
RC_PATH_THROUGH	[OFF]
232C POWON	[DISABLE]
PUBLIC MODE	[OFF]
RESET	
EXECUTE	

5. On Setting Items

* "EZ-SETUP" discussed below indicates "EZ-SETUP after the first power-on".

1) POWER ON FIXED

Selection	Selection between "Variable" and "Fixed" (loop provided)
Default	– (Variable)
Explanation	In "Fixed" setting, the power-off by the power key of the unit is invalidated and the image is kept being received. The power can be turned off by stopping the power supply from AC.
Limit in Setting	Refer to the "Power-On Fixed" sheet.
Exception	None
Remarks	• In "Variable" setting, the power operation is in wait for 1 sec. and then turned off when the main power switch is off.

2) MAXIMUM VOLUME

Selection	Adjustment from 0 to 60 (no loop)
Default	60
Explanation	Sound volume can not be adjusted higher than the preset value.
Limit in Setting	- When the sound volume is set lower than 59, only figures are displayed and the sound volume bar is not displayed. - The maximum sound volume for ON-timer (Wake up timer) is limited also to the preset value.
Exception	
Remarks	• When the sound volume is set higher than the MAX setting by the adjusting process, the sound volume control operation is prohibited for turn-up and the sound volume should be turned down to MAX in this state.

3) VOLUME FIXED

Selection	Selection between "Variable", "Fixed", "ACON (AC CTRL)" and "AC/RCON (AC/RC CTRL)" (loop provided)
Default	Variable
Explanation	- FIXED: Fixed at the level adjusted for a fixed volume. - AC CTRL: Start-up at the level specified for a fixed volume at ACON. - AC/RC CTRL: Start-up at the level specified for a fixed volume at start.
Limit in Setting	- The sound volume for the ON-timer (Wake up timer) is fixed also without display of menu. Besides, the setting is made impossible. (Basically, the menu is not displayed.) - The following keys become invalid: - Sound volume Up/Down (VOL +/-) [for both remote control and the unit] - Mute (MUTE)
Exception	• In the item "VOLUME" of adjustment process, the sound volume can be set freely irrespective of this setting.
Remarks	- As for sound volume fixing and sound volume MAX level, the sound volume fixing has priority. - Once the sound volume has been changed by adjustment process, it should be set back to the sound volume preset by sound volume fixing level when the adjustment process ends.

4) VOLUME FIXED LEVEL

Selection	Adjustment from 1 to 60 (no loop)
Default	20
Explanation	The sound volume to be fixed by "Volume fixed" is determined.
Limit in Setting	None
Exception	None
Remarks	Setting is valid only when "Volume fixed" is selected for "fixed".

5) R/C BUTTON

Selection	Selection between "Respond", "No Respond" and "Limited" (loop provided)
Default	Respond
Explanation	Making the remote controller settings. - At the "No Respond" setting, the remote controller keys are disabled. Its power key (reception/standby key) is disabled too. - At the "Limited" setting, some channel-related keys alone are operative. All the other remote controller keys (power, volume ▲/▼, channel ▲/▼, light control (brightness sensor), broadcast select) are inoperative.
Limit in Setting	① In "No respond" setting, all the keys (including the power key) are not accepted.
Exception	- Adjustment process, inspection process and hotel only keys are valid irrespective of setting. - All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting.
Remarks	

6) PANEL BUTTON

Selection	Selection between "Respond" and "No respond" (loop provided)
Default	Respond
Explanation	All the operations by keys (except the power key) of the unit can be invalidated.
Limit in Setting	
Exception	- Adjustment process, inspection mode and hotel menu mode can be started irrespective of setting. - All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting.
Remarks	

7) MENU BUTTON

Selection	Selection between "Respond" and "No respond" (loop provided)
Default	Respond
Explanation	In "No respond" setting, the menu operation by the menu key of the remote control and the menu key of the unit are invalidated.
Limit in Setting	
Exception	- Adjustment process, inspection mode and hotel menu mode can be started irrespective of setting. - All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting.
Remarks	

8) ON SCREEN DISPLAY

Selection	Selection between "Yes", "No" (loop provided)
Default	Yes
Explanation	- At the "No" setting, the following items are not displayed on screen: register, setting, adjustment menu, channel call and volume bar. On the wide-screen models, an input selection is immediately made because the menu is not displayed. - At the "Limited" setting, some items cannot be displayed on screen. On the Japan-destined models, the channel call "Message" alone cannot be displayed. (This is because the channel call message may be confused with a message being sent from the hotel.) On the North America-destined models, the OSD works the same as at the "No" setting.
Limit in Setting	Keys falling under any of the following items become invalid. ① Appearance of screen changes and the sound changes. ② Personal functions which are hard to restore. Screen display, menu, OFF-timer, ON-timer, AV MODE, screen size switching, clock setting, treble emphasis, AUDIO ONLY, sound changeover, LANGUAGE, CLOSED CAPTION
Others	Simple input switching is generated. Those which are restored soon after leaving as they are and may be requested for change by customer are not prohibited. Brightness sensor (BACKLIGHT) and PIC. FLIP
Exception	Such a caution which is displayed independently is displayed as it is. Non-responding signal caution
Remarks	When CC has already been ON, CLOSED CAPTION is displayed.

9) INPUT MODE START

Selection	Selection between "Normal", "Air (✱)", "Blu-ray", "INPUT 1/2/3", "PC", "HDMI 1/2/3/4/5", "DVI" (loop provided)
Default	Normal
Explanation	In power-ON, the input source to be started or channel can be set. (In standard mode, the operation follows the last memory.)
About options	- All the input sources in the model are made selectable. - In TV mode, the channel to be set follows the last memory and the content of the last memory is included in the notation by options. Ex.) Air (2), Cable (98.1) etc.
Limit in Setting	The display of channel setting menu and the channel setting operation are prohibited.
Exception	
Remarks	In setting at "Normal", the setting of "Input mode fixed" is changed to "Variable" and selection should be prohibited.

10)INPUT MODE FIXED

Selection	Selection between "Variable", "Fixed", "ACON (AC CTRL)" and "AC/RCON (AC/RC CTRL)" (loop provided)
Default	– (Variable)
Explanation	• At the "Fixed" setting, the TV set gets started with the settings of "Input mode start", and then any other channels and inputs are not accepted. • At the "ACON (AC CTRL)" setting, the TV set gets started with the settings of "Input mode start" under AC control. • At the "AC/RCON (AC/RC CTRL)" setting, the TV set gets started with the settings of "Input mode start" under either control.
Limit in Setting	• With the execution of hotel mode, the input source is forced to change to that set by "Input mode start" and the channel switching and input switching are prohibited thereafter. • ON-timer's (Wake-up timer) channel items are not displayed or the operation is prohibited. (Basically, they are not displayed.) • The following keys are invalidated. CH ▲ / ▼, direct tuning button, FLASHBACK, input *However, the keys (input switching and CH ▲ / ▼ keys) of the unit for menu operation remain valid.
Exception	None
Remarks	• In the following case, setting is cancelled and mode is changed to "Variable". ① When the setting of "Input mode start" is set to "Normal".

11)RC_PATH_THROUGH

Selection	Selection between "OFF", "ON: TV RCE" and "ON: TV RCD" (loop provided)
Default	OFF
Explanation	Function to feed the remote controller-received signal to Pin 9 (open) on the RS232C.
Limit in Setting	None
Exception	None
Remarks	None

12)AV POSITION FIXED

Selection	Selection between "Variable" and "Fixed" (loop provided)
Default	Variable
Explanation	In case of "Fixed" setting, – Menu "Picture" and "Audio" setting can't be changed like "Dynamic (Fixed)". – When "AV Mode" key is pressed, TV just displays current AV Mode (cannot be changed.).
Limit in Setting	None
Exception	None
Remarks	• When receiving with AV Position key, OPC, Dolby key and other direct audio select keys, the current display stays on and no setting can be changed. • Even by initializing personal information, the hotel-mode settings are kept intact. In this way, the AV positions, video and audio adjustment settings are not initialized.

13)LOUD SPEAKER (ON/OFF)

Selection	Selection between "ON" and "OFF" (loop provided)
Default	ON
Explanation	If "OFF" is selected, TV stops Speaker output even without Headphone connected.
Limit in Setting	None
Exception	None
Remarks	• Press the volume UP/DOWN key, and the mute icon appears for 4 seconds. • The mute key and audio-related keys are displayed with caution. • Usually, the headphones and monitor audio outputs can be adjustable.

14)232C POWON

Selection	Selection between "Disable" and "Enable" (loop provided)
Default	Disable
Explanation	In the standby mode, the power-on by the 232C command is enabled or disabled.
Limit in Setting	None
Exception	None
Remarks	None

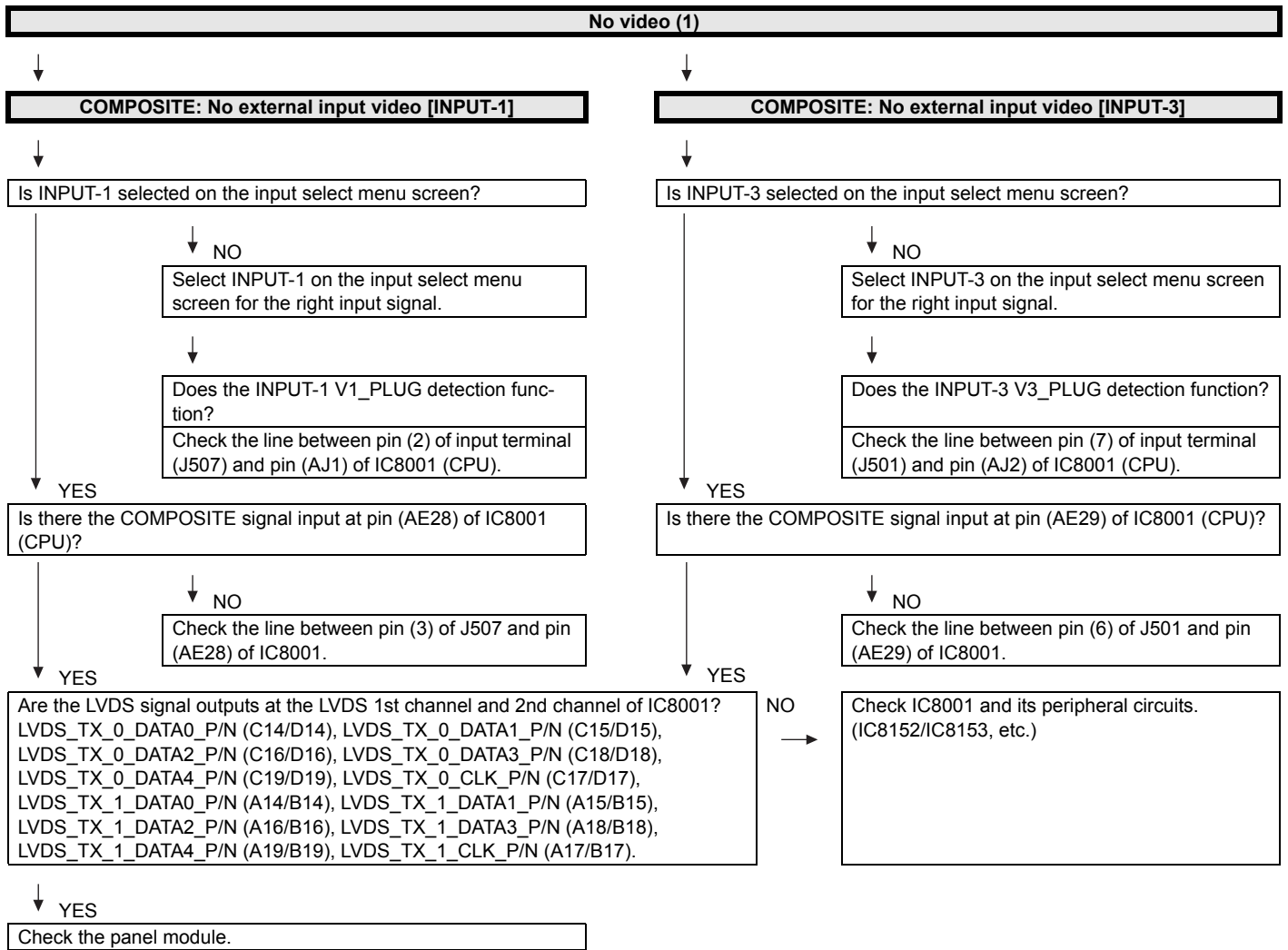
LC-46SB57U/LC-52SB57U

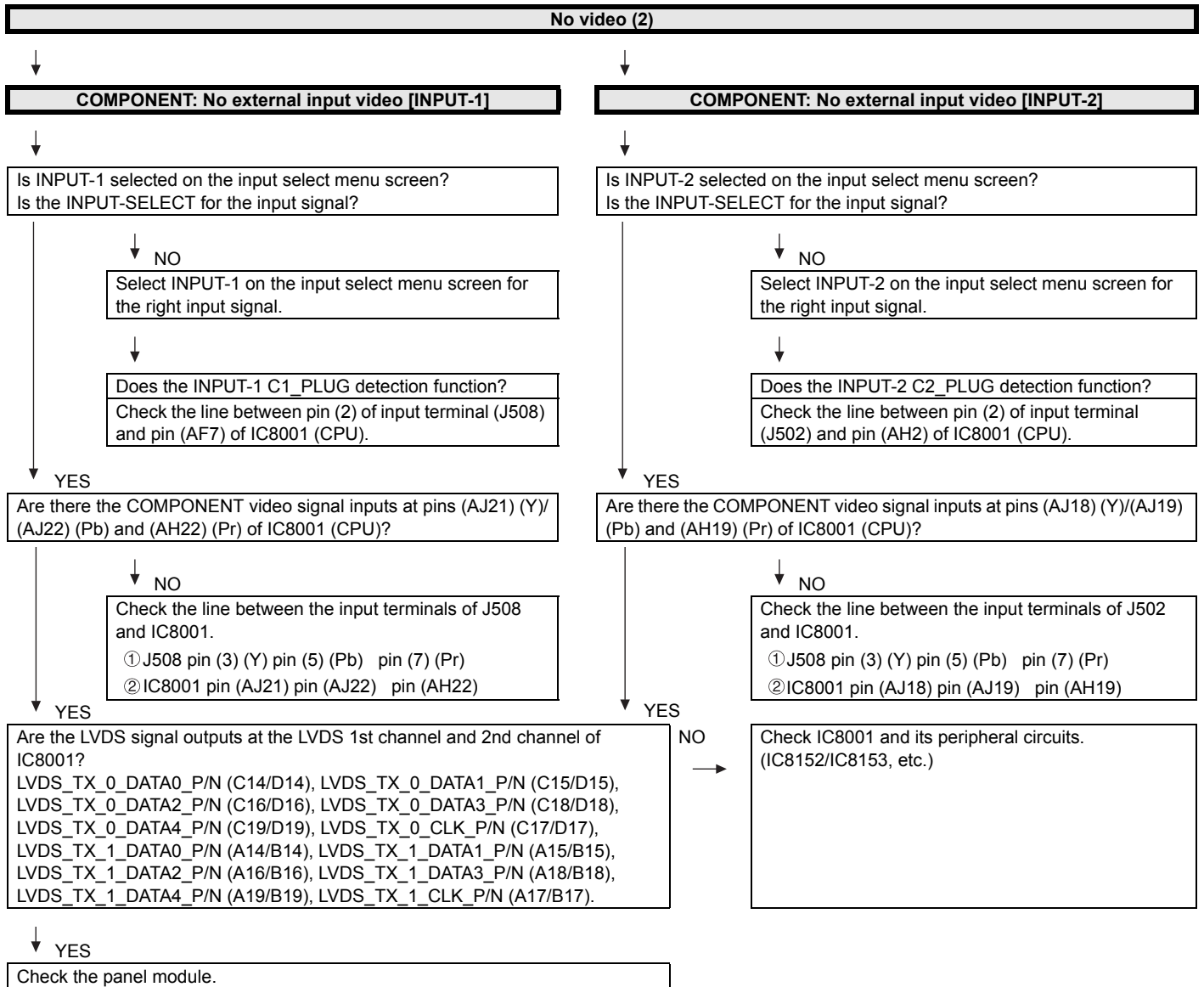
15)PUBLIC MODE (ON/OFF)

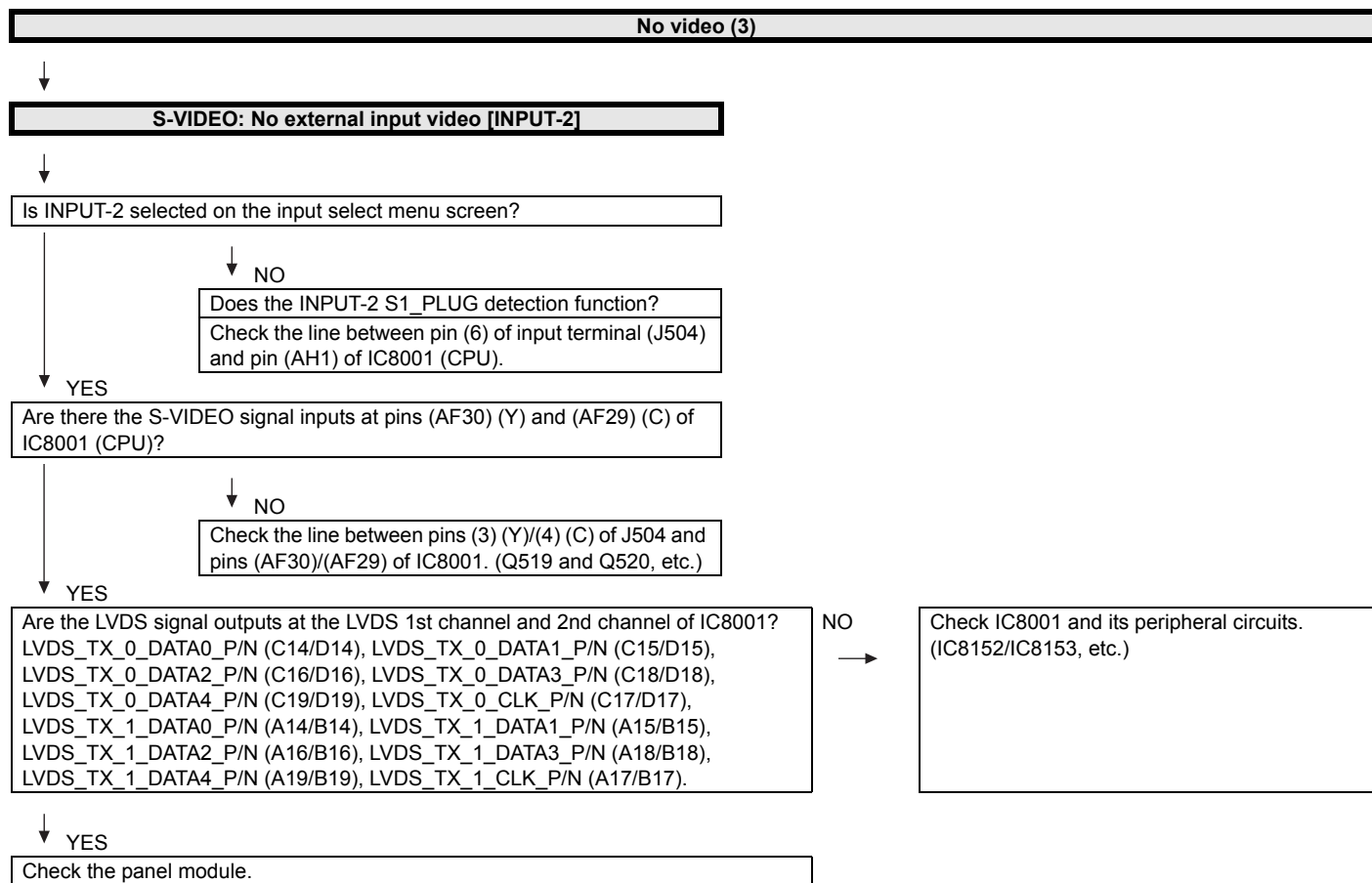
Selection	Selection between “ON” and “OFF” (loop provided)
Default	OFF
Explanation	In case of “ON”, public mode settings are effected.
Limit in Setting	None
Exception	None
Remarks	The public-mode settings are operable only when this item is set at ON.

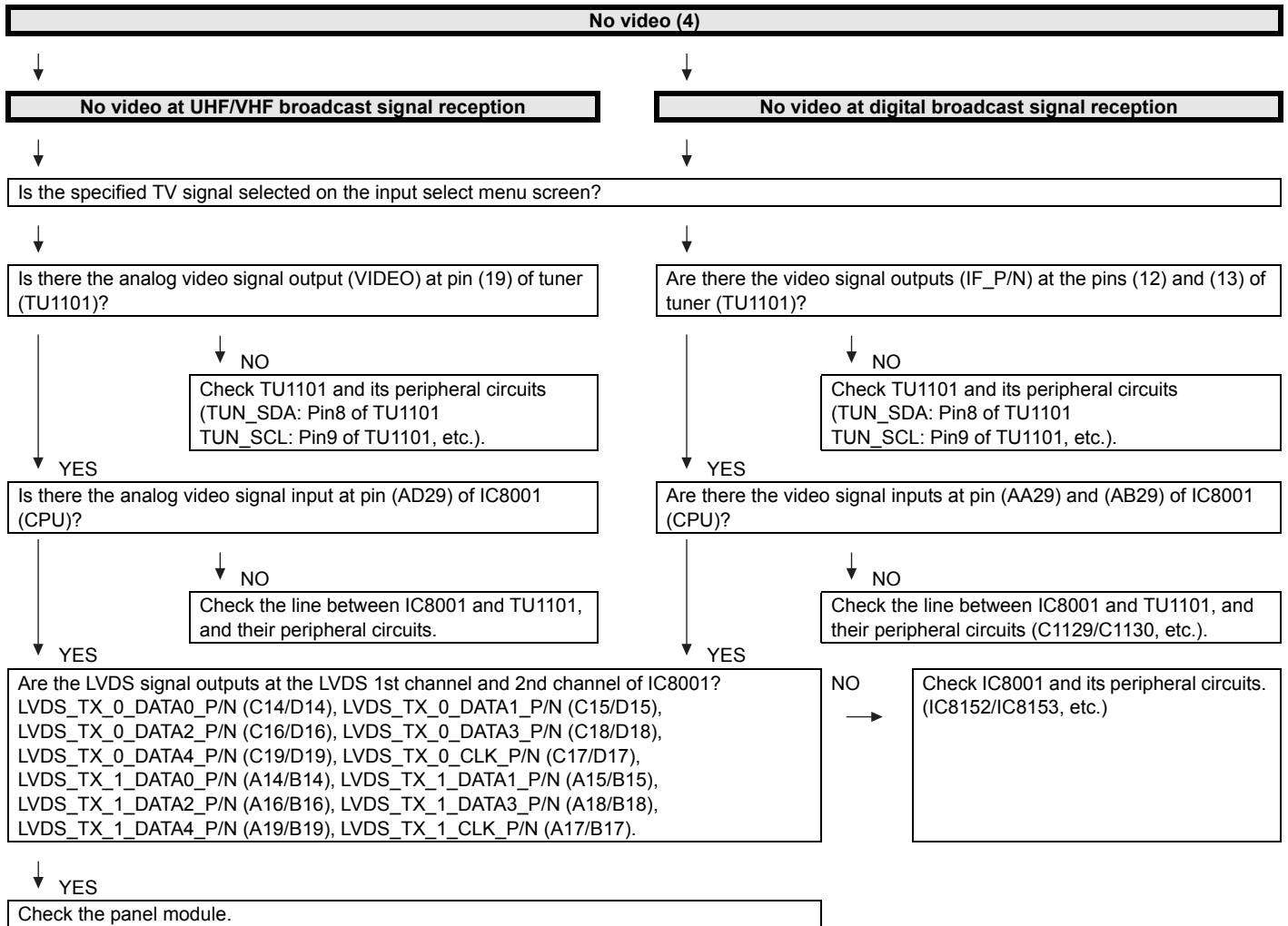
CHAPTER 6. TROUBLESHOOTING TABLE

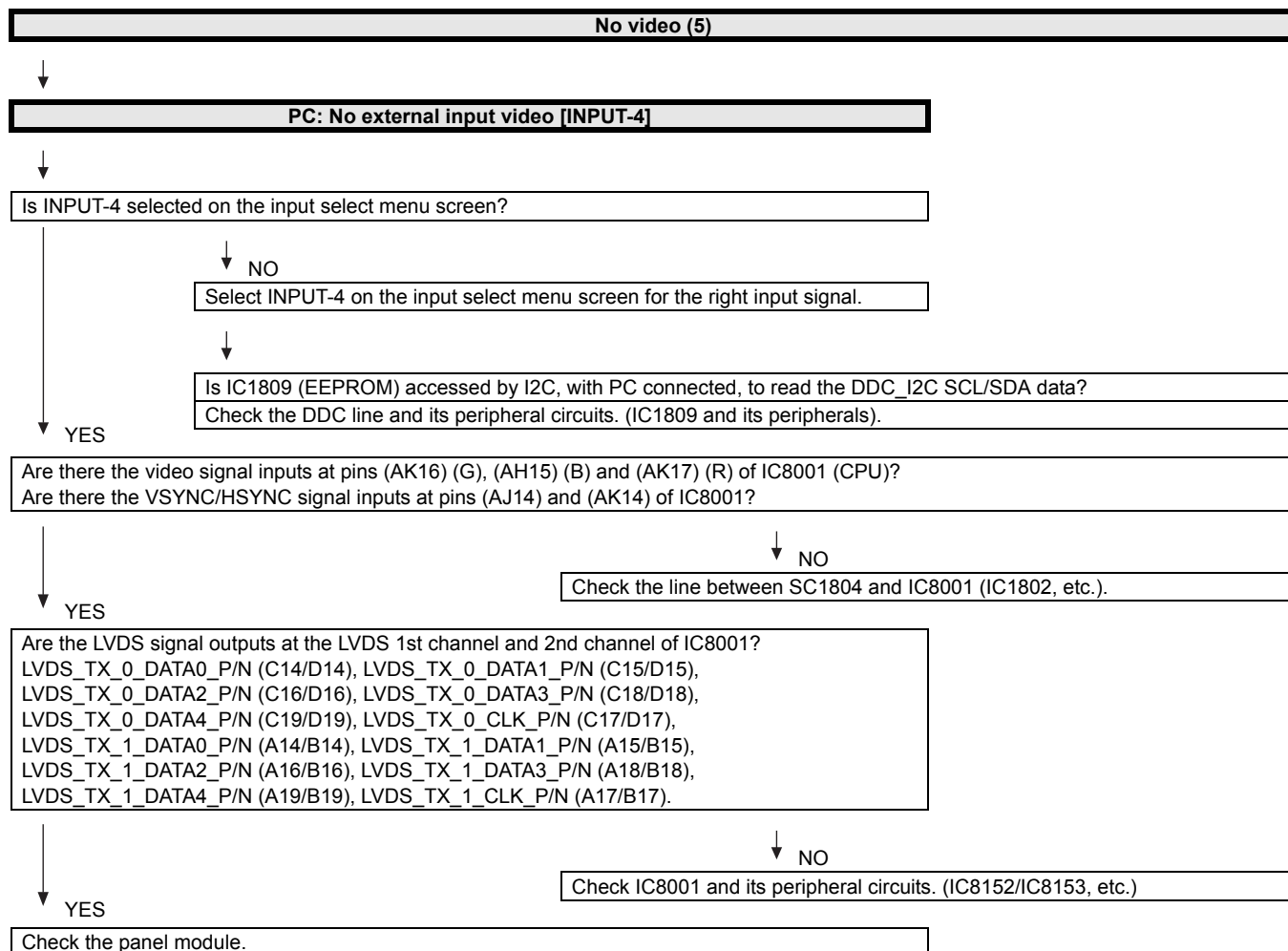
[1] TROUBLESHOOTING TABLE

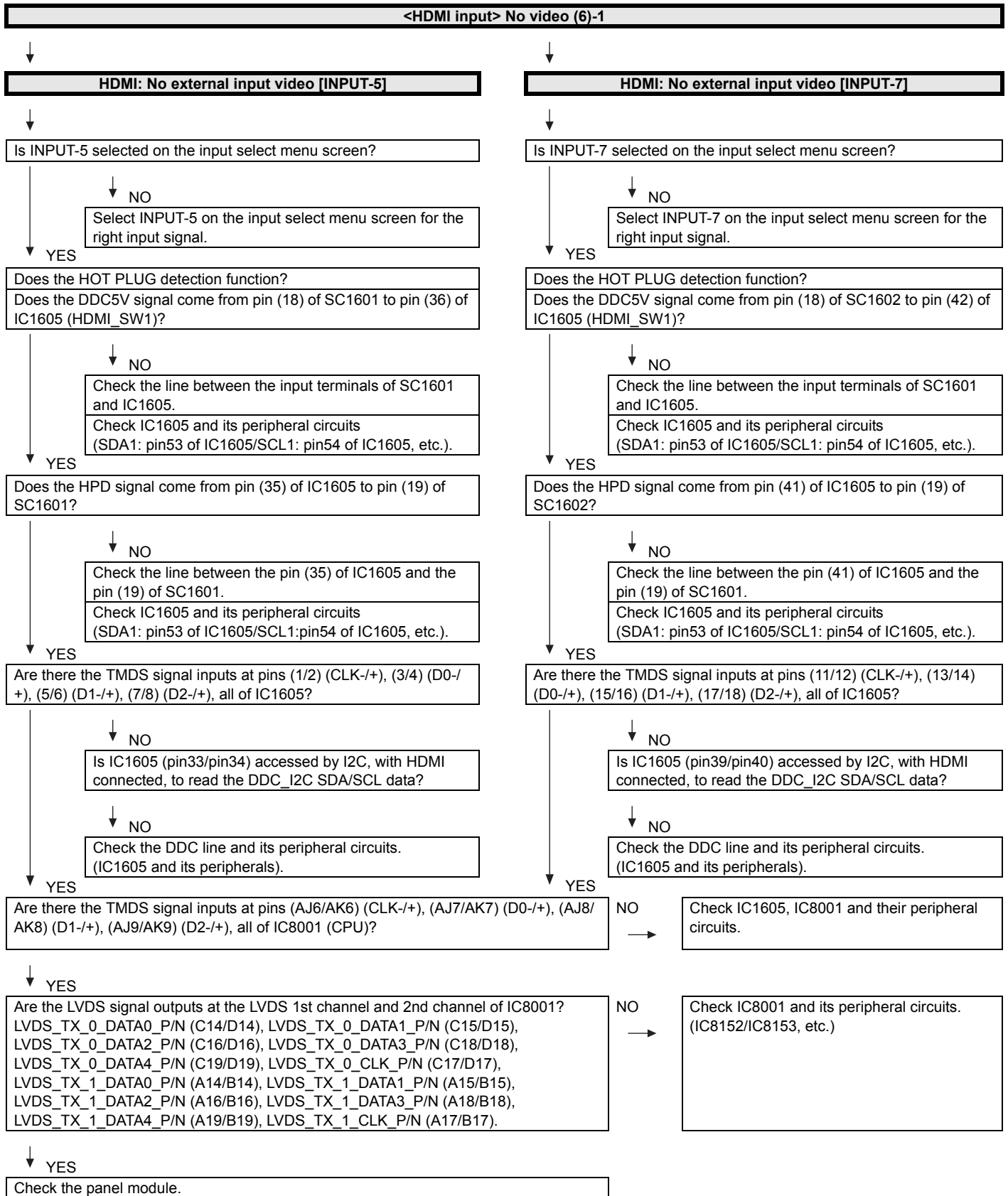


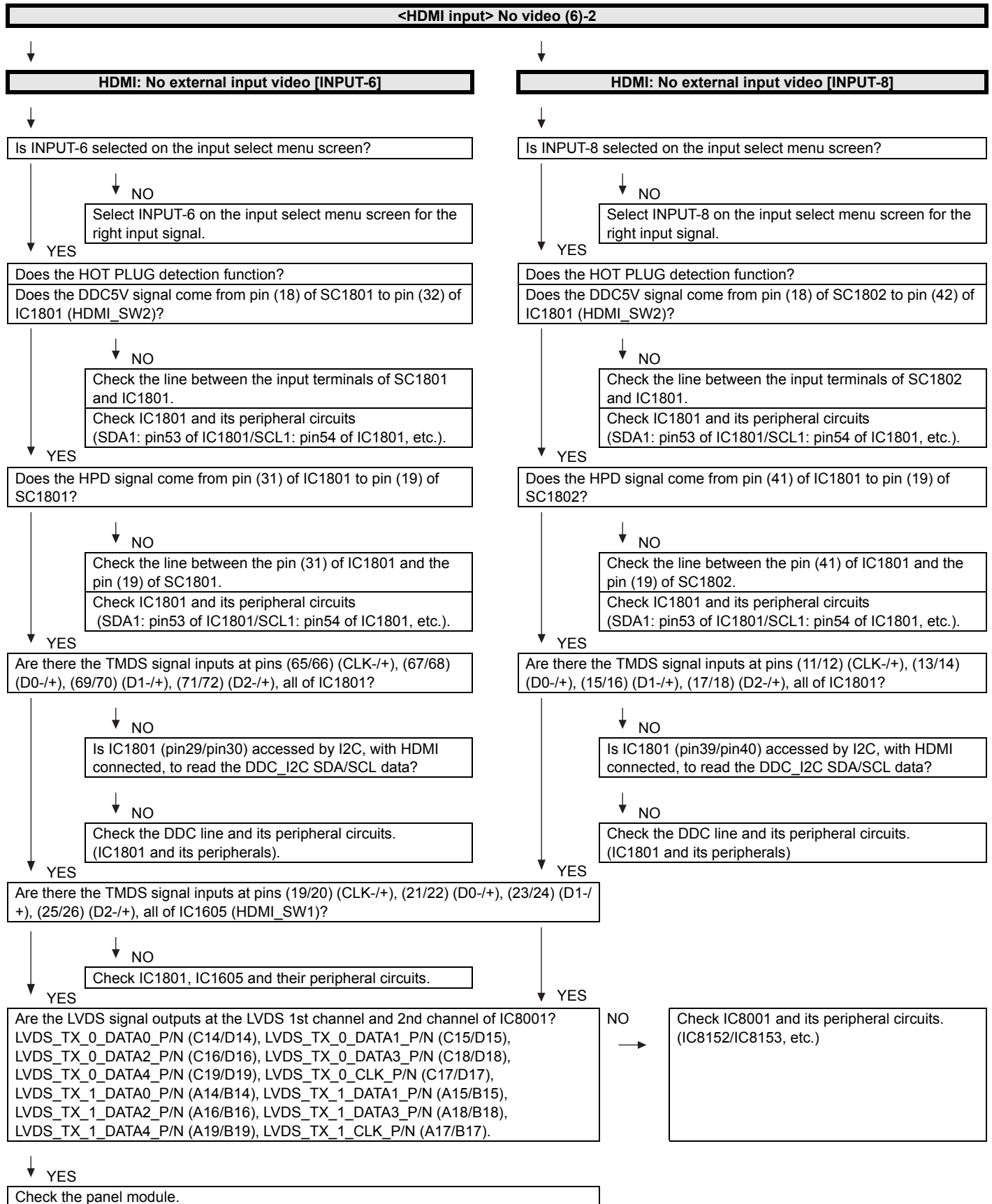


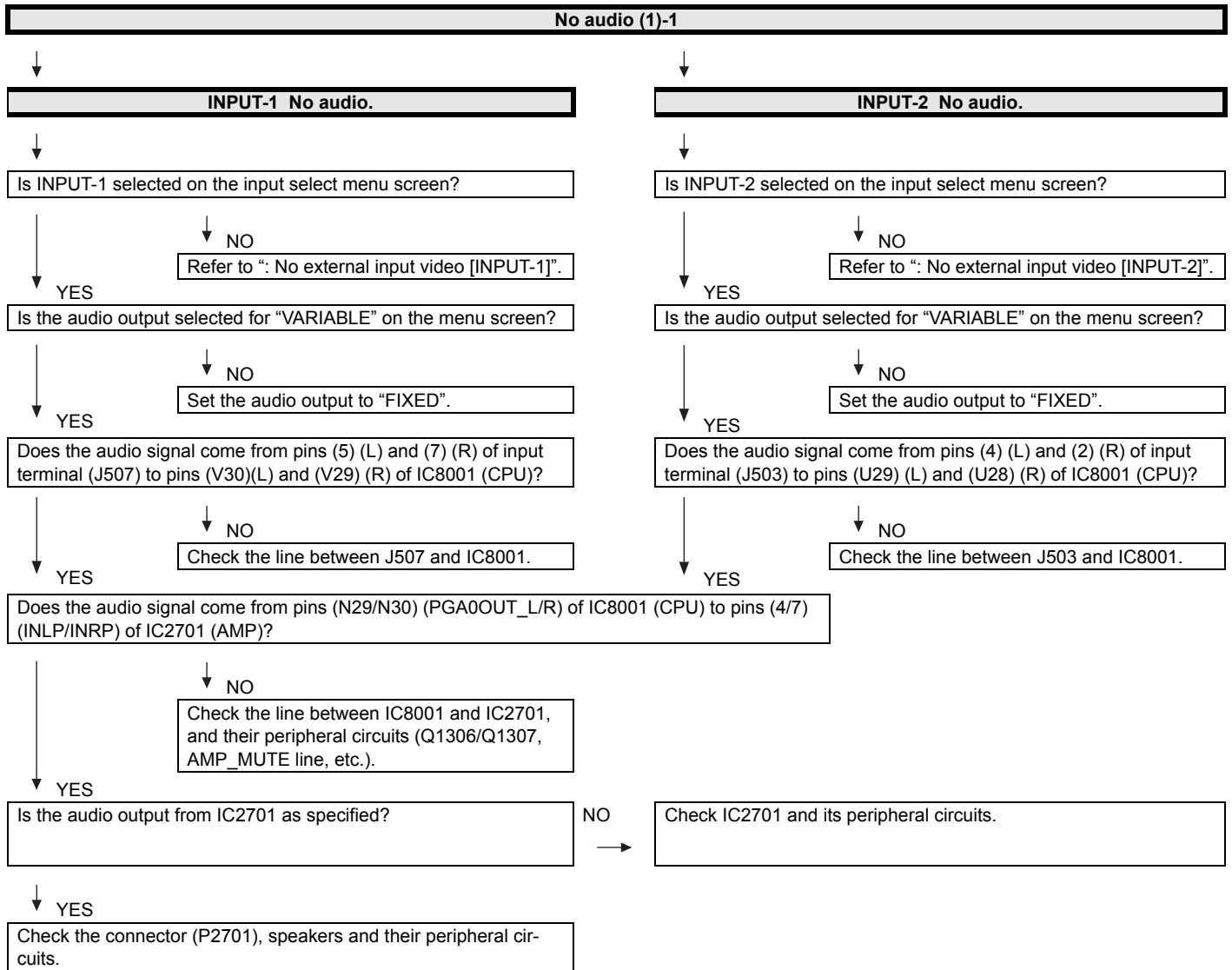


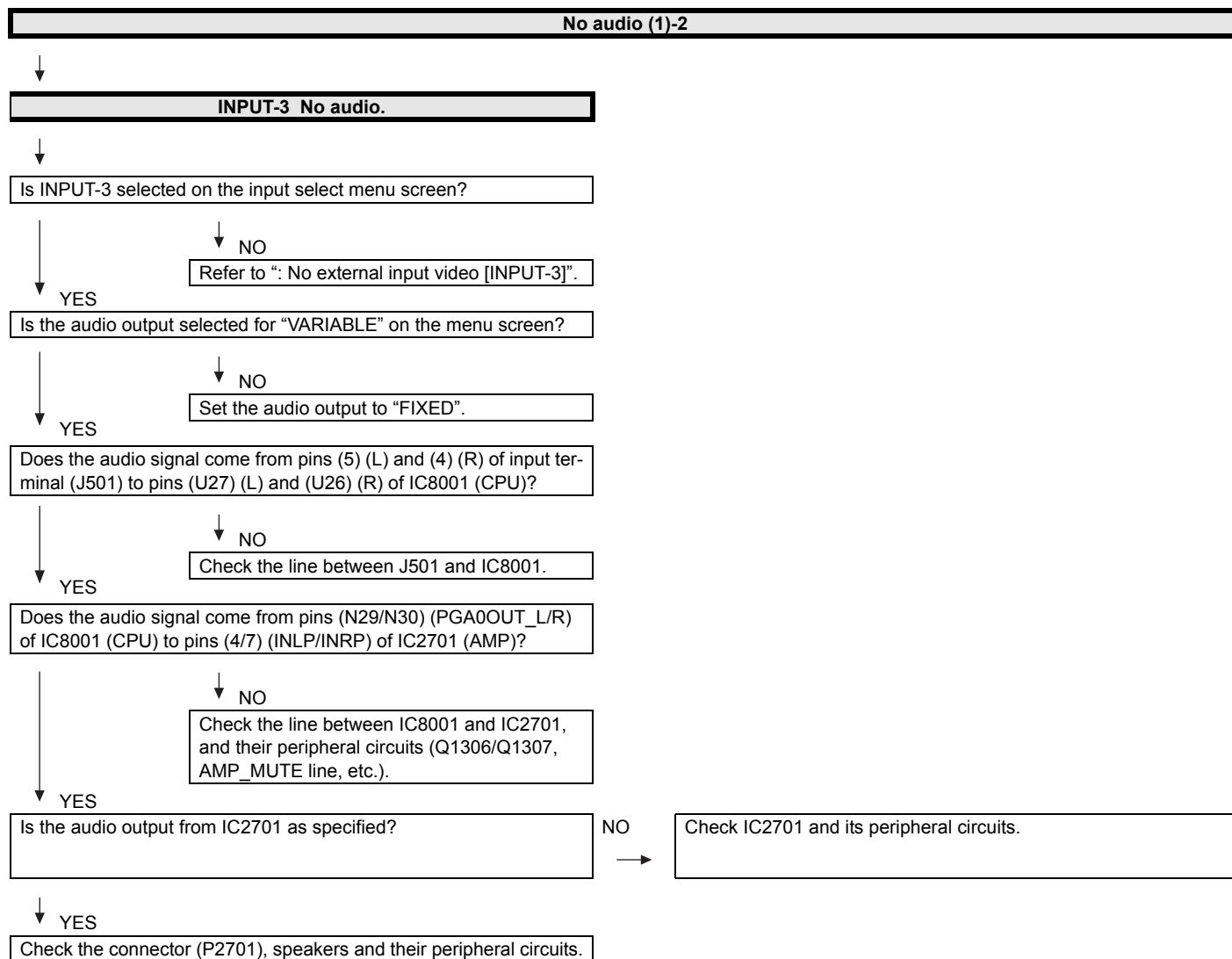


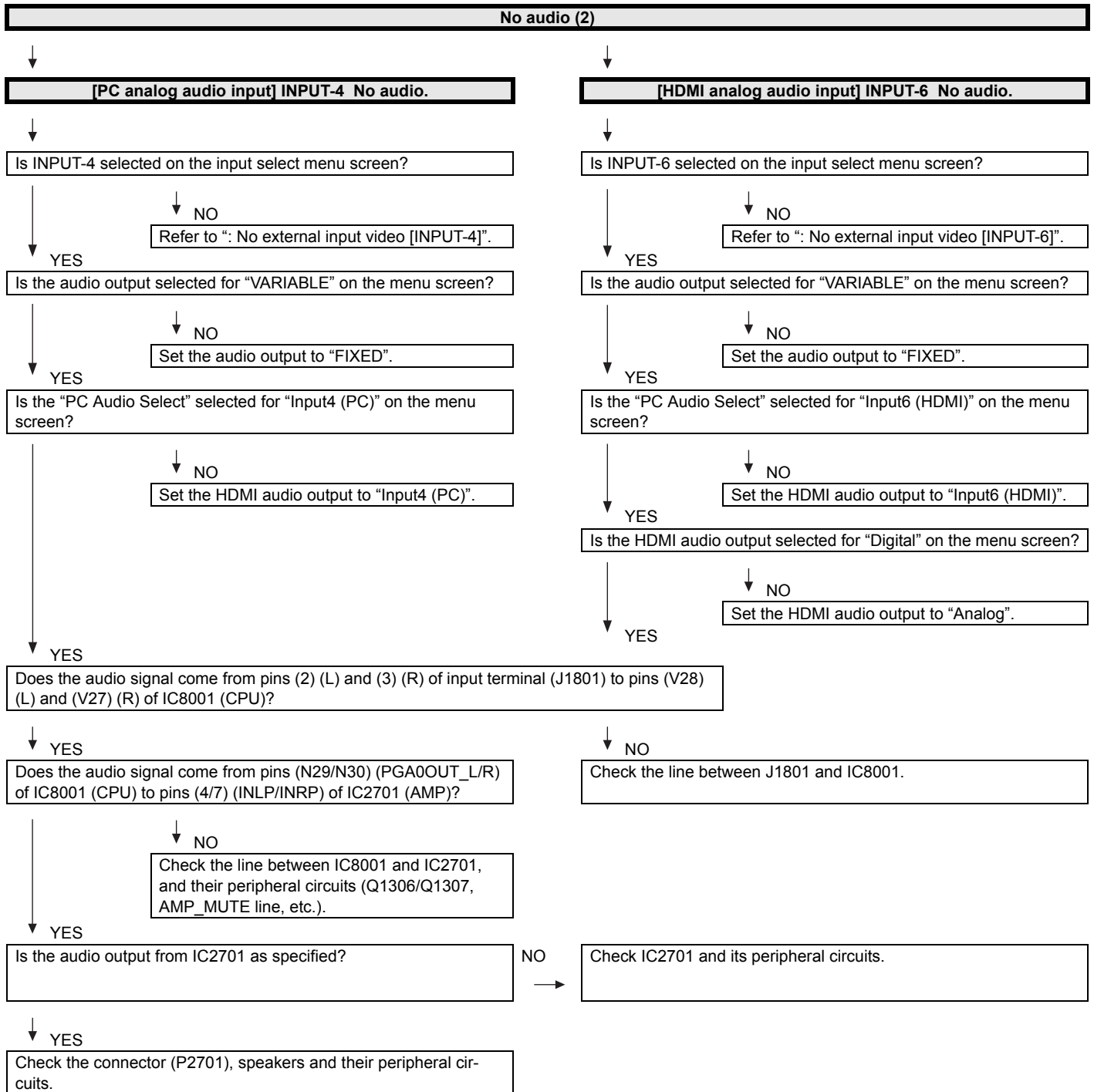


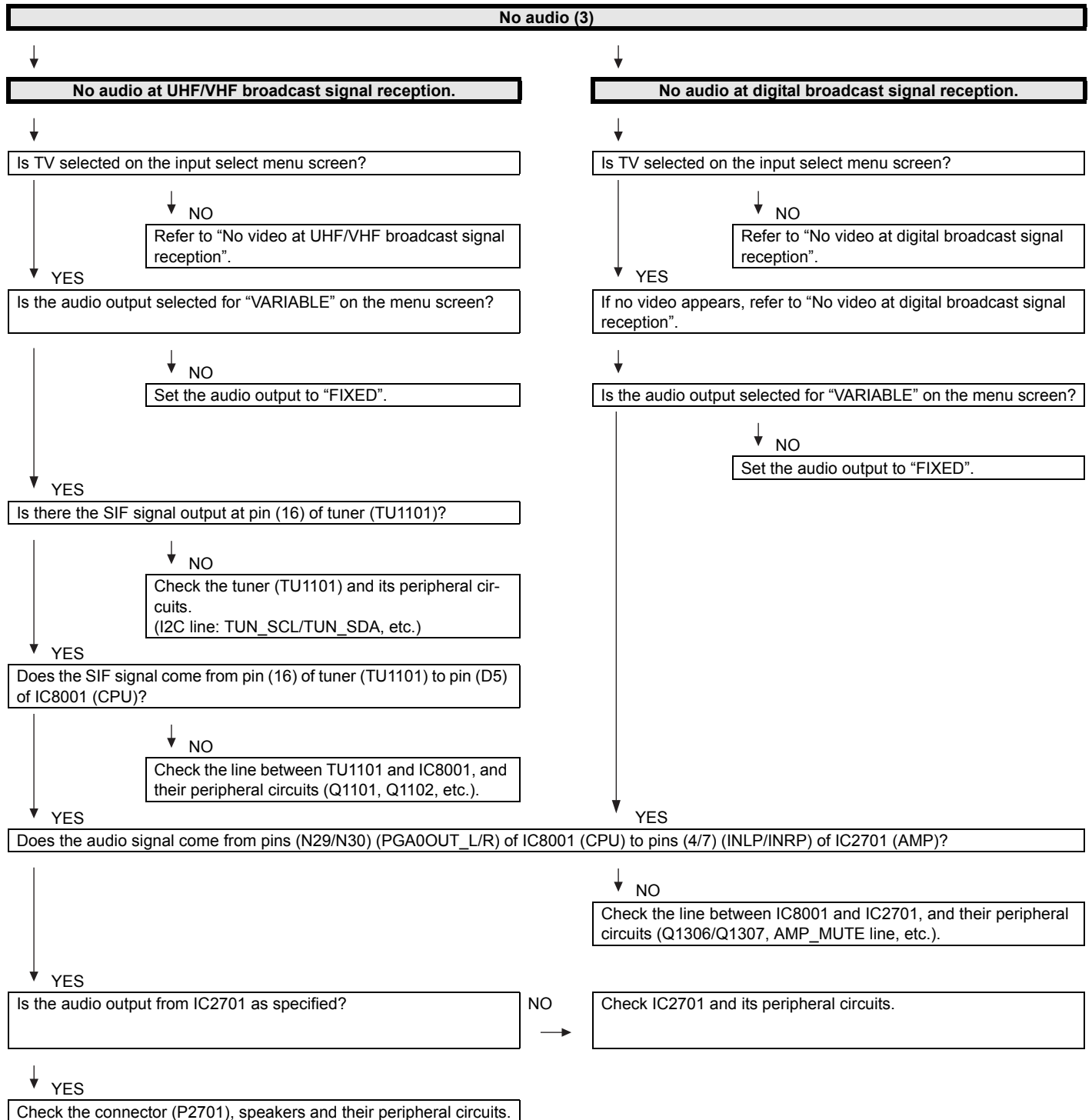


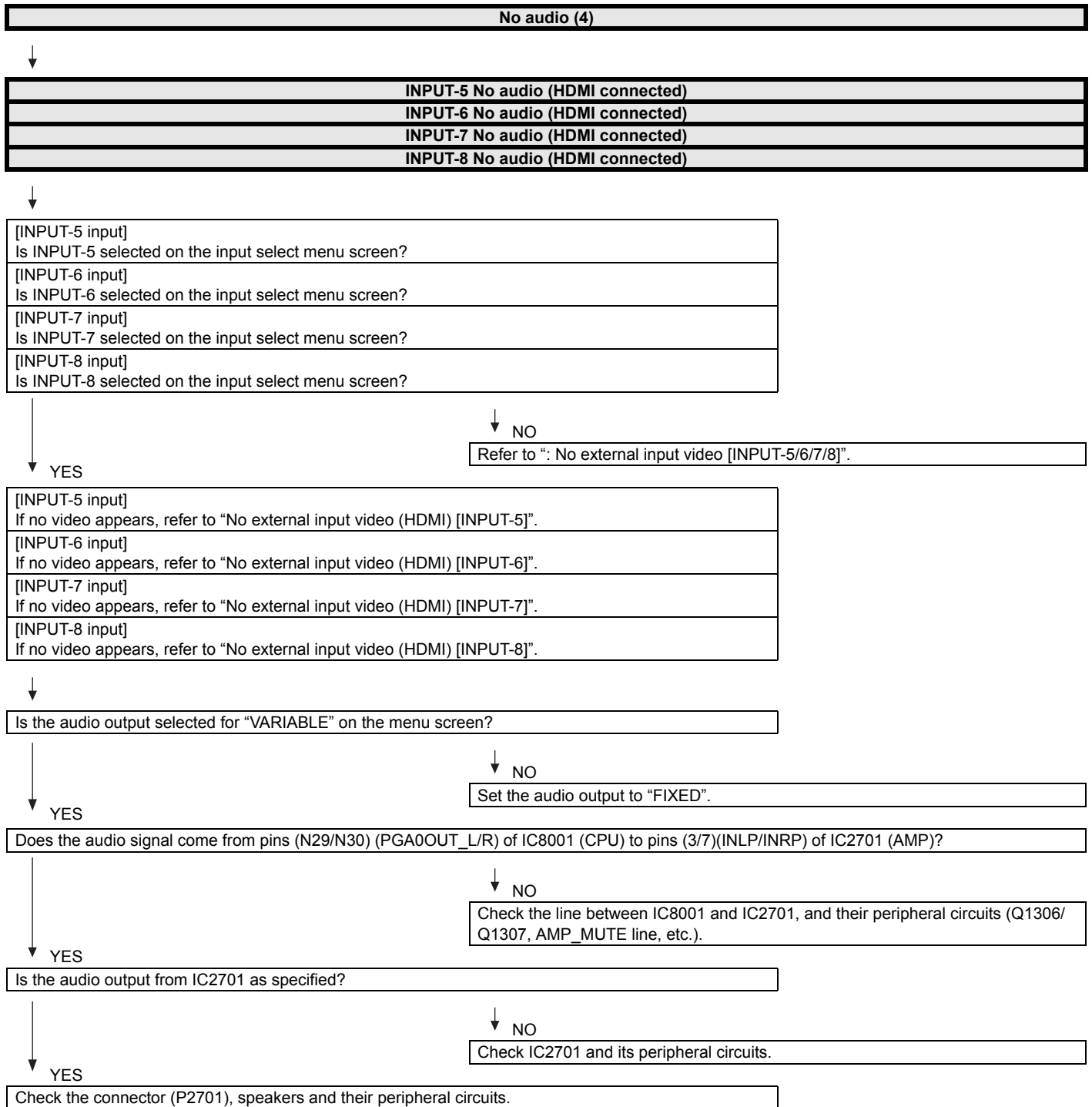


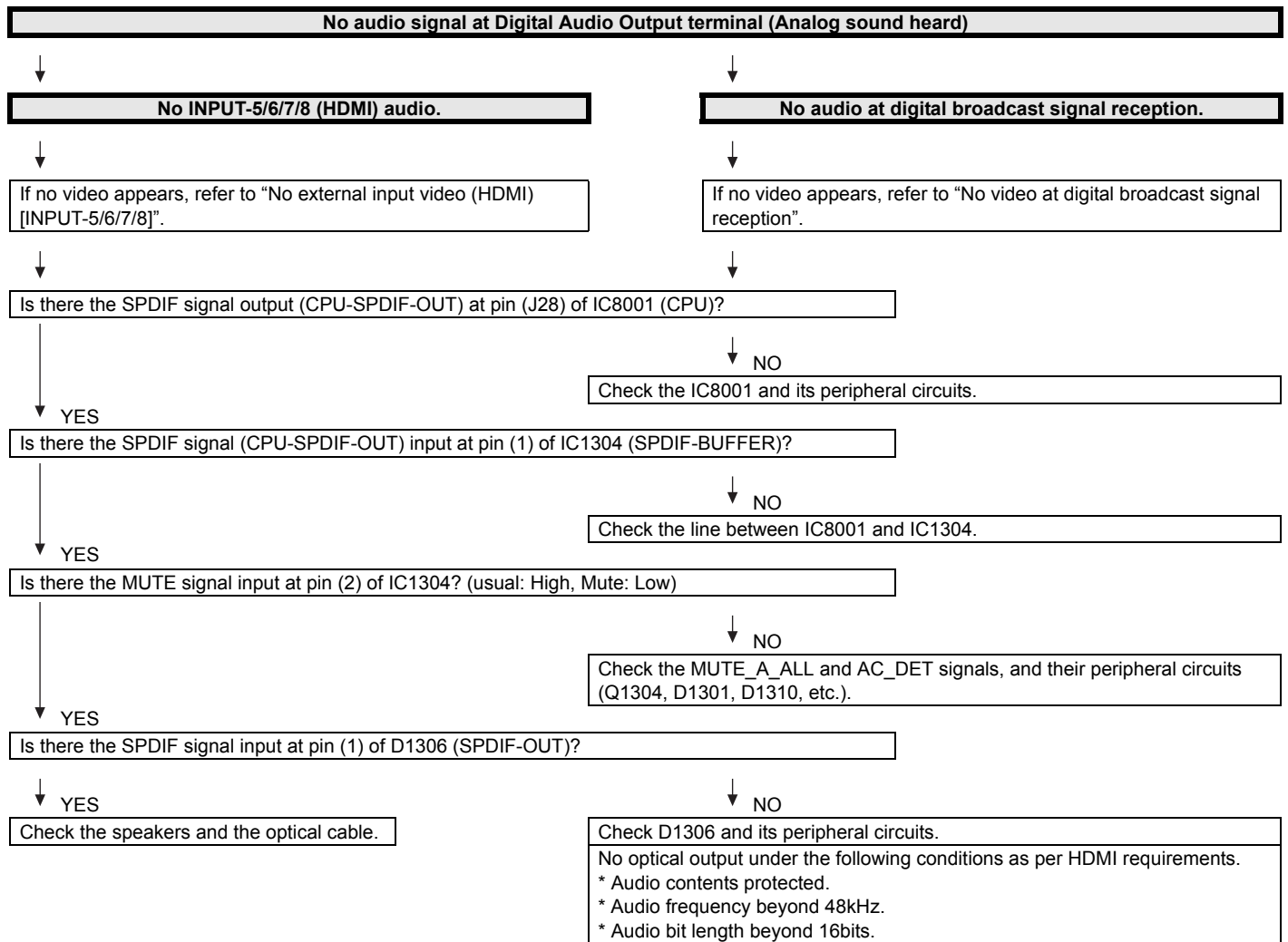


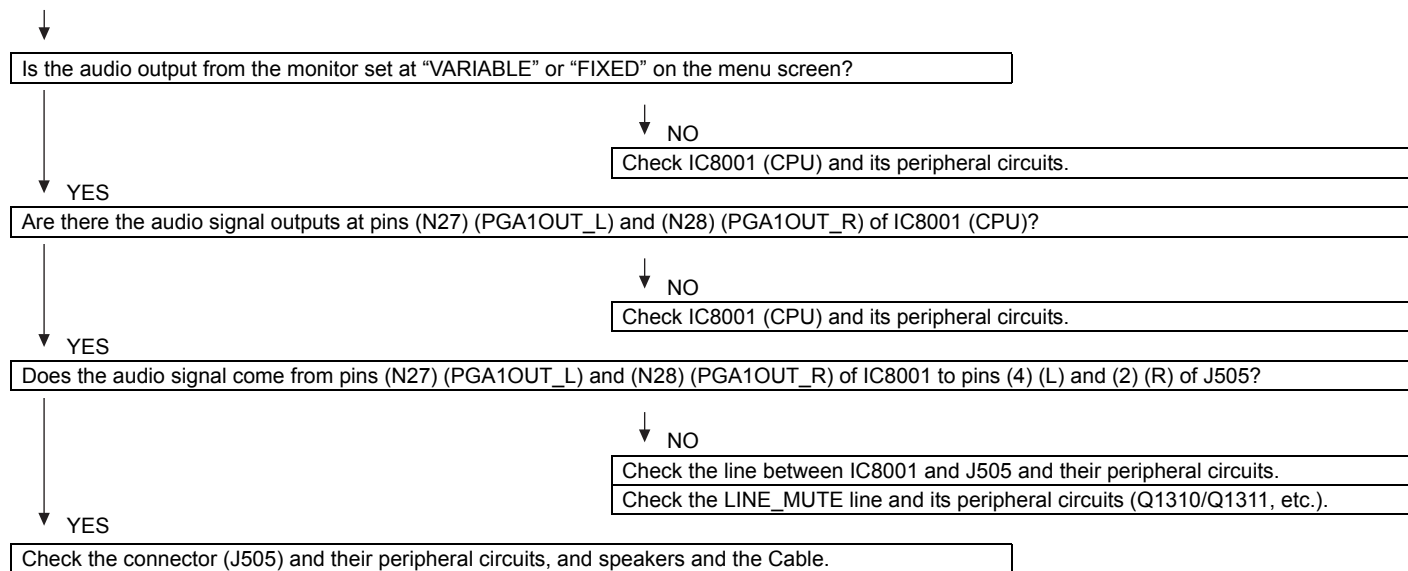










No monitor audio output

LED flashing timing chart for error notification.

**1) Power LED (Large classification)**

Error type	Power green LED operation (1 cycle)	Pins are monitor microprocessor (IC2002) pins.
Lamp error Flashes once: Fast	H: On L: Off	ERR_PNL (40pin): L error. Confirmed after 10 consecutive detections at 500 ms intervals (detected only when the backlight is on). Note that after five detection counts, the lamp cannot be activated except in the monitoring process. (For the first time, only the inverter is reset, and error OFF is not activated.) [Clearing method of the accumulated counts] •Set "LAMP ERROR" on page 1 of the process A to 0. •AC_ON is performed with [CH_DOWN] and [VOL_UP] on the unit down. •Continuous illumination for 3 minutes.
Power error Flashes twice	H: On L: Off	Refer to "Power error details".
Communication error with the main CPU Flashes 3 times	H: On L: Off	Refer to "Communication error details". Communication line error or main CPU communication error → Check debug statements for the main CPU. Communication line with the main CPU: TxD(75pin), RxD(76pin)
Monitor temperature error Flashes 5 times	H: On L: Off	If the panel temperature is 60°C or more for 15 seconds or more in a row, CAUTION appears on the OSD ("TEMPERATURE" flashes in red in the lower right portion of the screen). If the panel temperature is 60°C or more for 25 seconds or more in a row, error standby is activated. [Avoidance method] Reduce the value of MONITOR MAX TEMP (temperature protection threshold) on page 28 of the process A.
BD unit error Flashes 6 times	H: On L: Off	BD unit error For the error details, refer to "standby cause" in the process menu.
Program area data destruction Flashes 8 times	H: On L: Off	Flash ROM data error in the microprocessor [Recovery method] Write the microprocessor software.

2) Power error details (Power LED flashes twice and OPC LED flashes)

Error type	OPC LED operation (1 cycle)	Pins are monitor microprocessor pins unless otherwise specified.
DET_15V error Flashes once	H: On  L: Off	DET_15V (34pin). UR10V or A9V is not applied. If error is detected during operation, error standby is activated by polling.
DET_D3V3 error Flashes twice	H: On  L: Off	DET_D3V3 (36pin) error (L). D3.3V is not applied. If error is detected during operation, error standby is activated by polling.
DET_5V error Flashes 3 times	H: On  L: Off	DET_5V (33pin) error (L). D5V or A5V is not applied. If error is detected during operation, error standby is activated by polling.
PNL_12V error Flashes 5 times	H: On  L: Off	DET_PNL_12V (35pin) error (L). Panel power is not applied. If error is detected during operation, error standby is activated by polling.
Main error Flashes 7 times	H: On  L: Off	Main microprocessor detection error (AMP error, etc.) Details are displayed in "ERROR STANDBY CAUSE" on page 1 of the process A for the main microprocessor.
TCON ROM error Flashes 8 times	H: On  L: Off	LCD controller ROM error It is notified by communication from the main CPU.

3) Communication error details (Power LED flashes 3 times and OPC LED flashes)

Error type	OPC LED operation (1 cycle)	Basically, log analysis of debug print statements or communication log analysis by a bus monitor is performed.
Initial communication reception error Flashes once	H: On  L: Off	Initial communication from the main CPU is not received. (Request for the monitor model No. is not received after canceling the reset.) → Communication line error or main CPU start-up failure.
Time-out setting reception error Start-up confirmation reception error Flashes twice	H: On  L: Off	Time-out setting and start-up mode change from the main CPU is not received. (Start-up communication of time-out setting and start-up mode change is not received.) → Main CPU start-up failure or monitor microprocessor reception failure.
Regular communication error Flashes 3 times	H: On  L: Off	Regular communication that is performed at 1 second intervals in the normal operation is interrupted. → Main CPU operation failure or monitor microprocessor reception failure.

MONITOR_ERR_CAUSE list

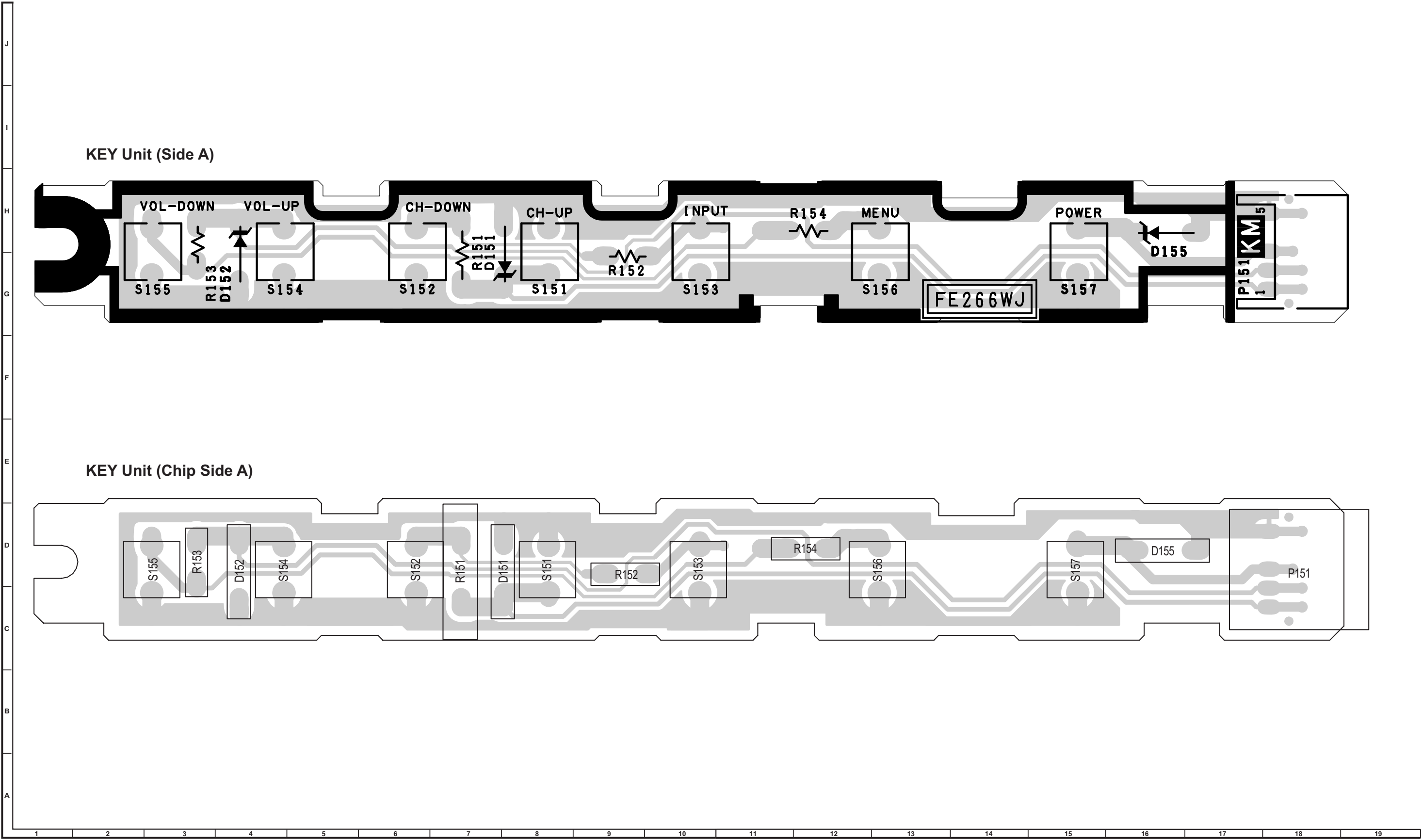
No.		Description
Dec.	Hex.	
0	0	No error
1	1	6V detection error
2	2	Panel 5V detection error
3	3	10V detection error
4	4	D3.3V detection error
6	6	Lamp error
8	8	Main CPU reset cancel - Start-up completion command reception time-out
9	9	Start-up completion command reception - Time-out setting command reception time-out
10	A	Time-out setting command reception - Start-up reason change command reception time-out
11	B	Regular communication time-out
12	C	Temperature protection
16	10	Error notification from the main CPU
17	11	Time-out during ending sequence
18	12	TCON ROM error
19	13	BD unit error

[illegible]



CHAPTER 8. PRINTED WIRING BOARD ASSEMBLIES

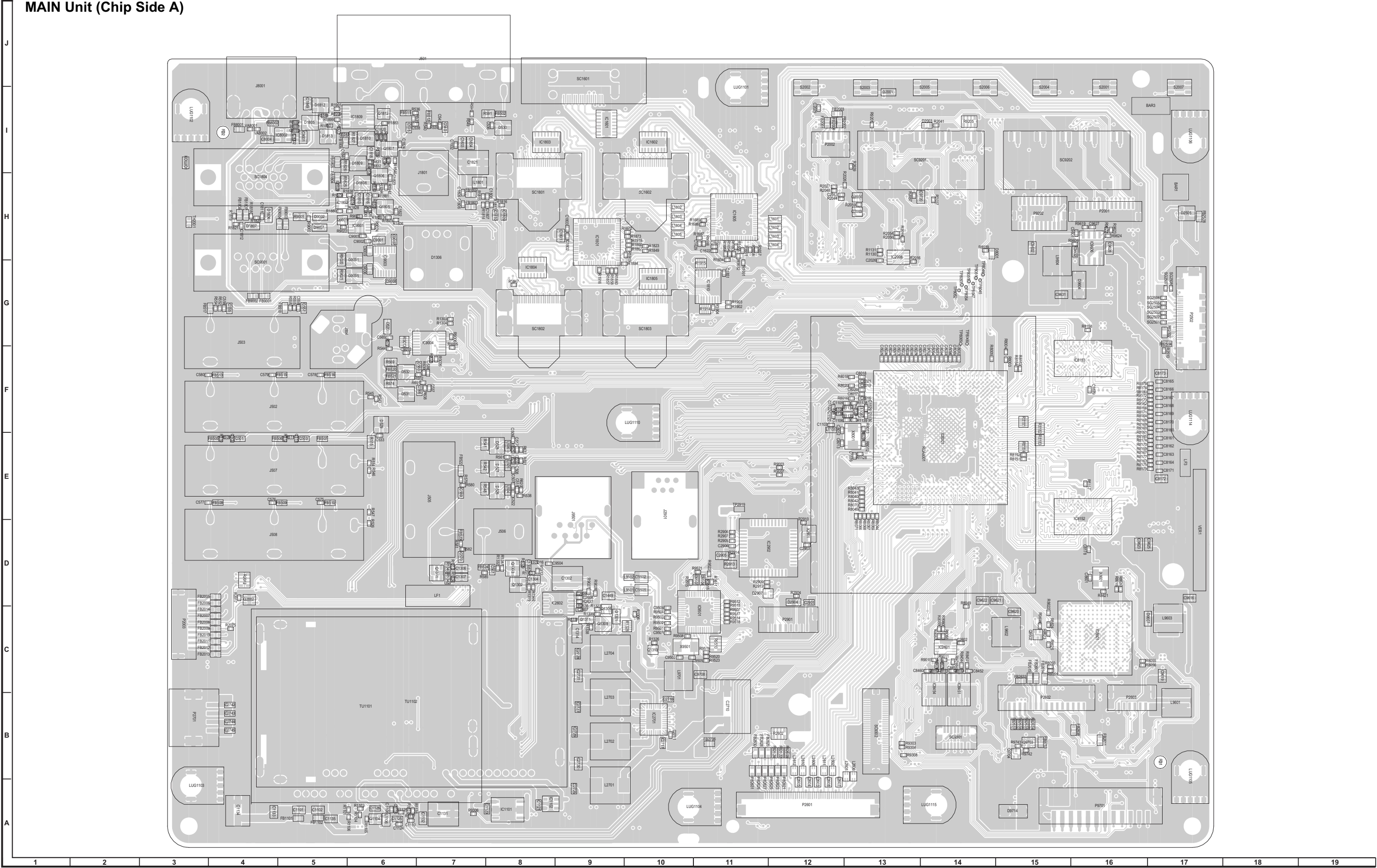
[1] KEY Unit



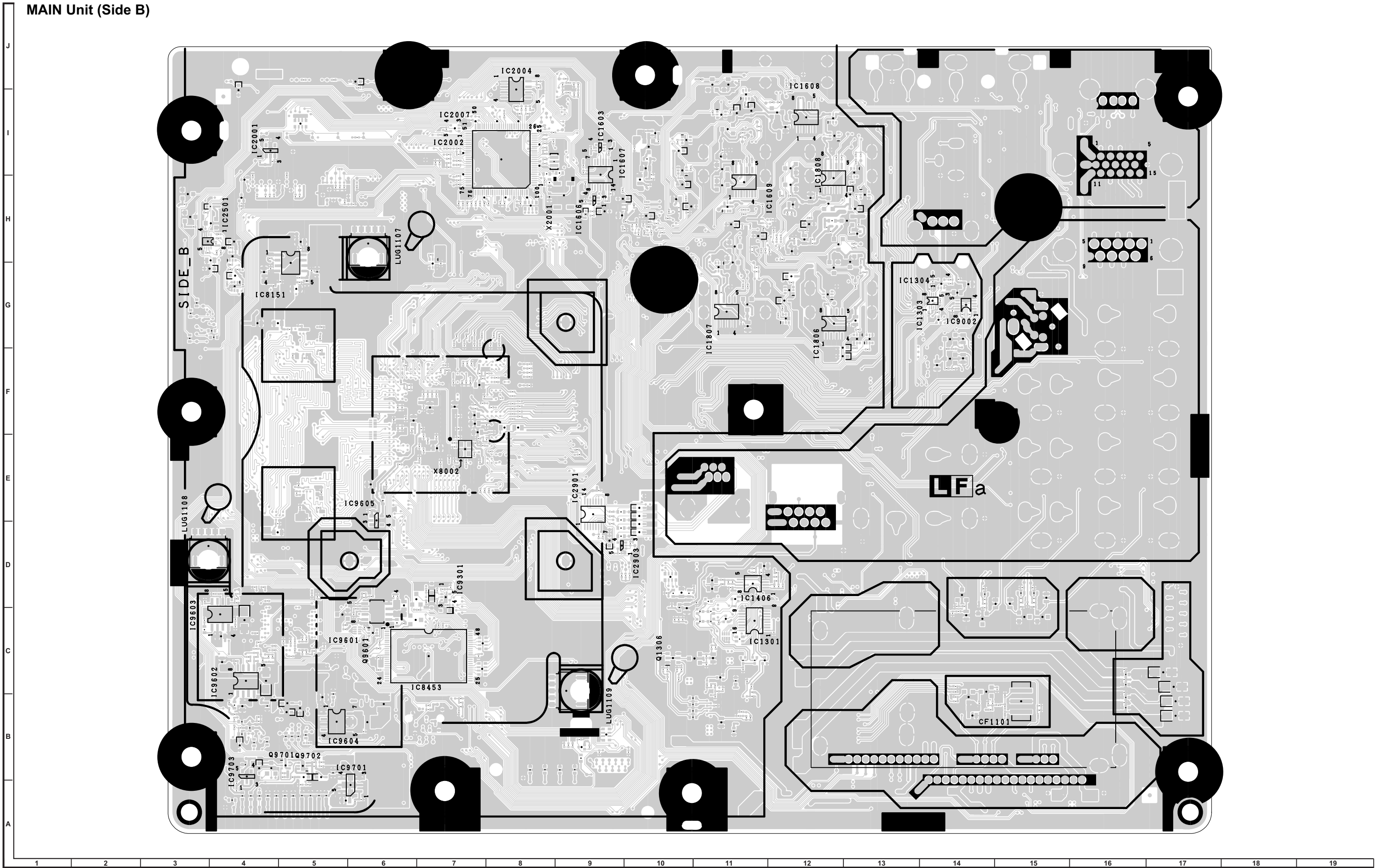
A
B
C
D
E
F
G
H
I
J



MAIN Unit (Chip Side A)

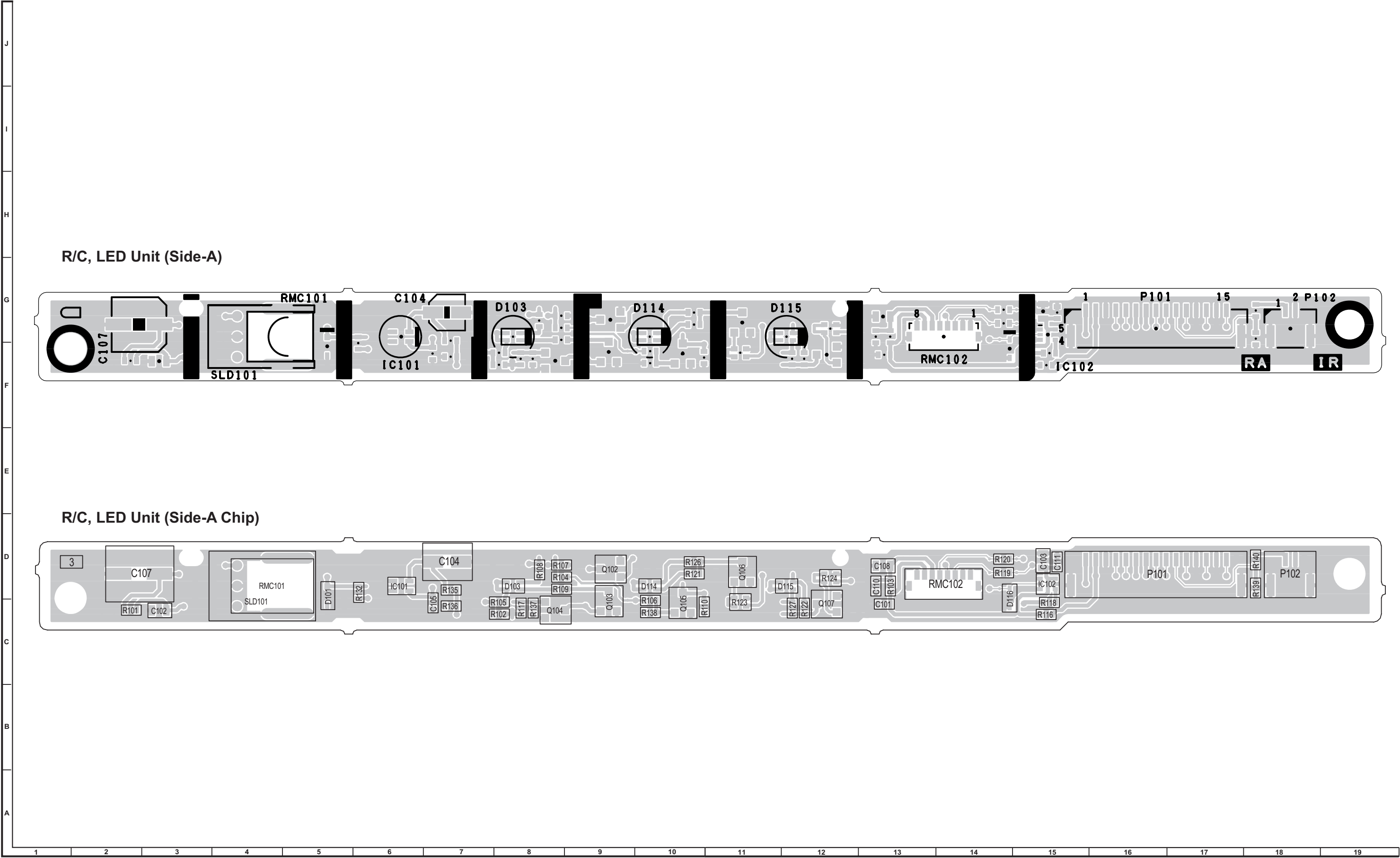


MAIN Unit (Side B)



A	
B	
C	
D	
E	
F	
G	
H	
I	
J	

[3] R/C, LED Unit



CHAPTER 9. SCHEMATIC DIAGRAM

[1] DESCRIPTION OF SCHEMATIC DIAGRAM

1. VOLTAGE MEASUREMENT CONDITION:

- 1) The voltages at test points are measured on exclusive AC adaptor and the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

2. INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

- 1) The unit of resistance "Ω" is omitted.
(K=kΩ=1000Ω, M=MΩ).
- 2) All resistors are ± 5%, unless otherwise noted.
(K= ± 10%, F= ± 1%, D= ± 0.5%)
- 3) All resistors are 1/16W, unless otherwise noted.

CAPACITOR

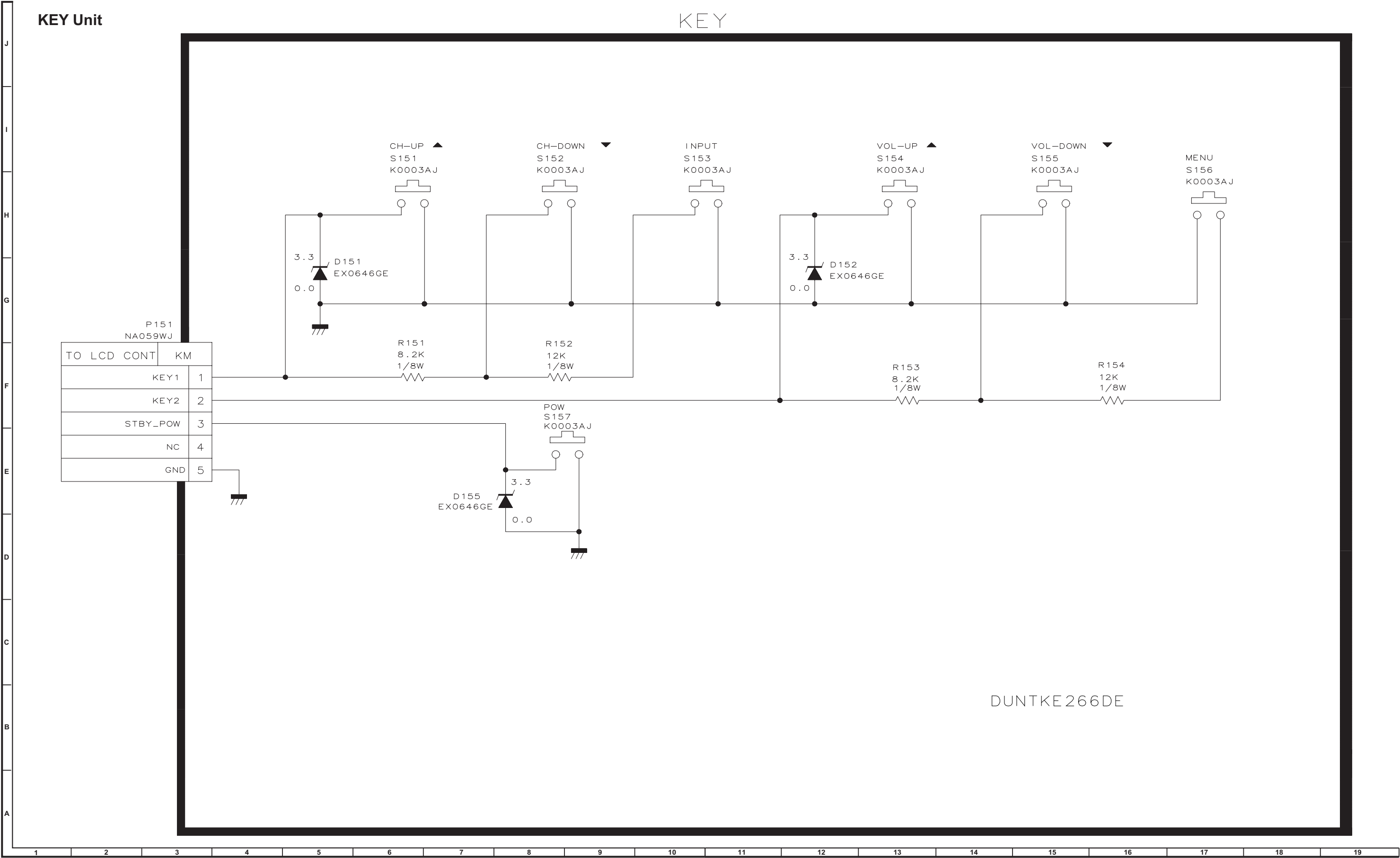
- 1) All capacitors are μF, unless otherwise noted.
(P=pF=μμF).
- 2) All capacitors are 50V, unless otherwise noted.

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

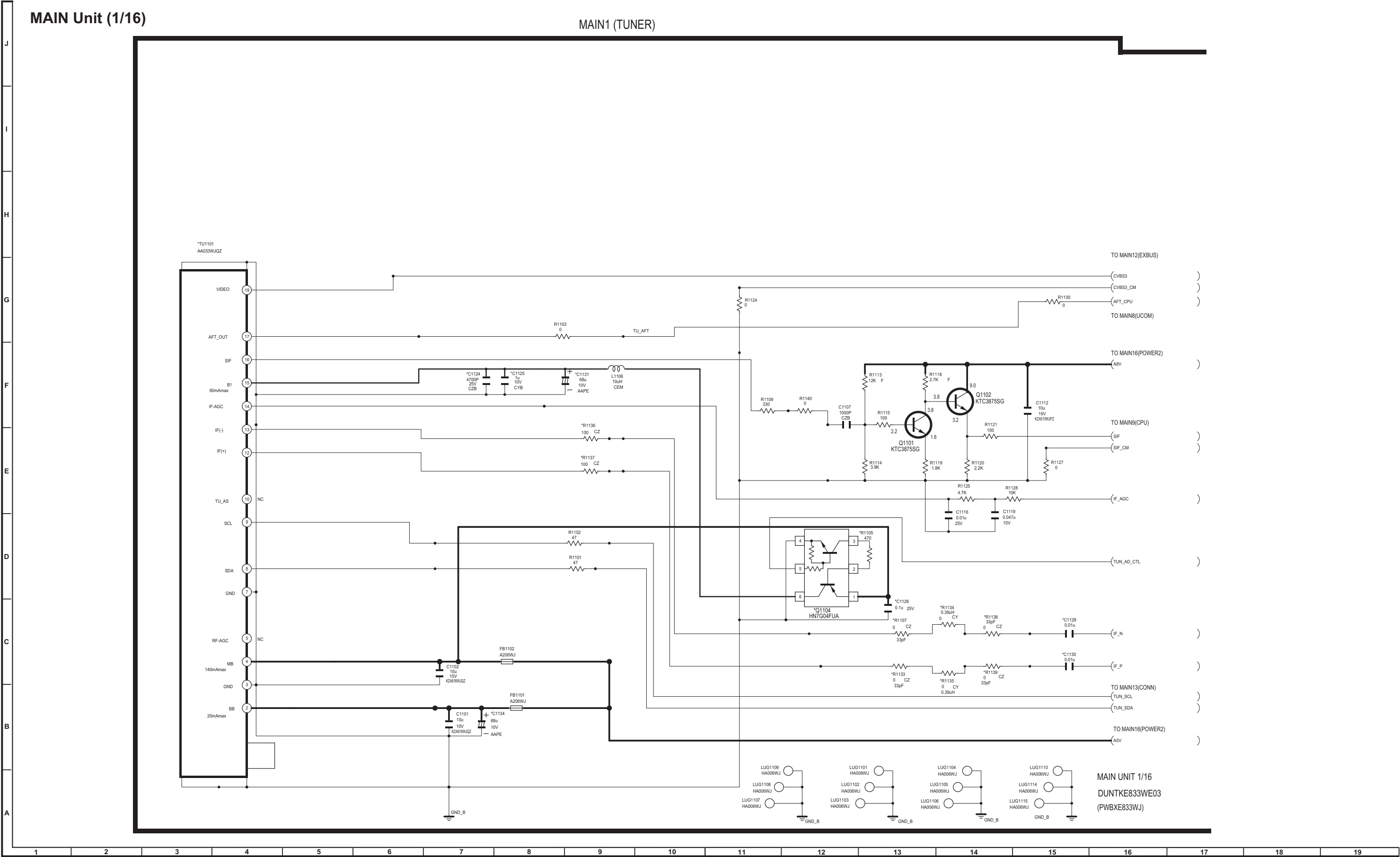
SAFETY NOTES:
1) DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2) SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:
PARTS MARKED WITH " ⚠ " () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

AVIS DE SECURITE IMPORTANT:
LES PIECES MARQUEES " ⚠ " () SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL. NE REMPLACER CES PIEDES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.



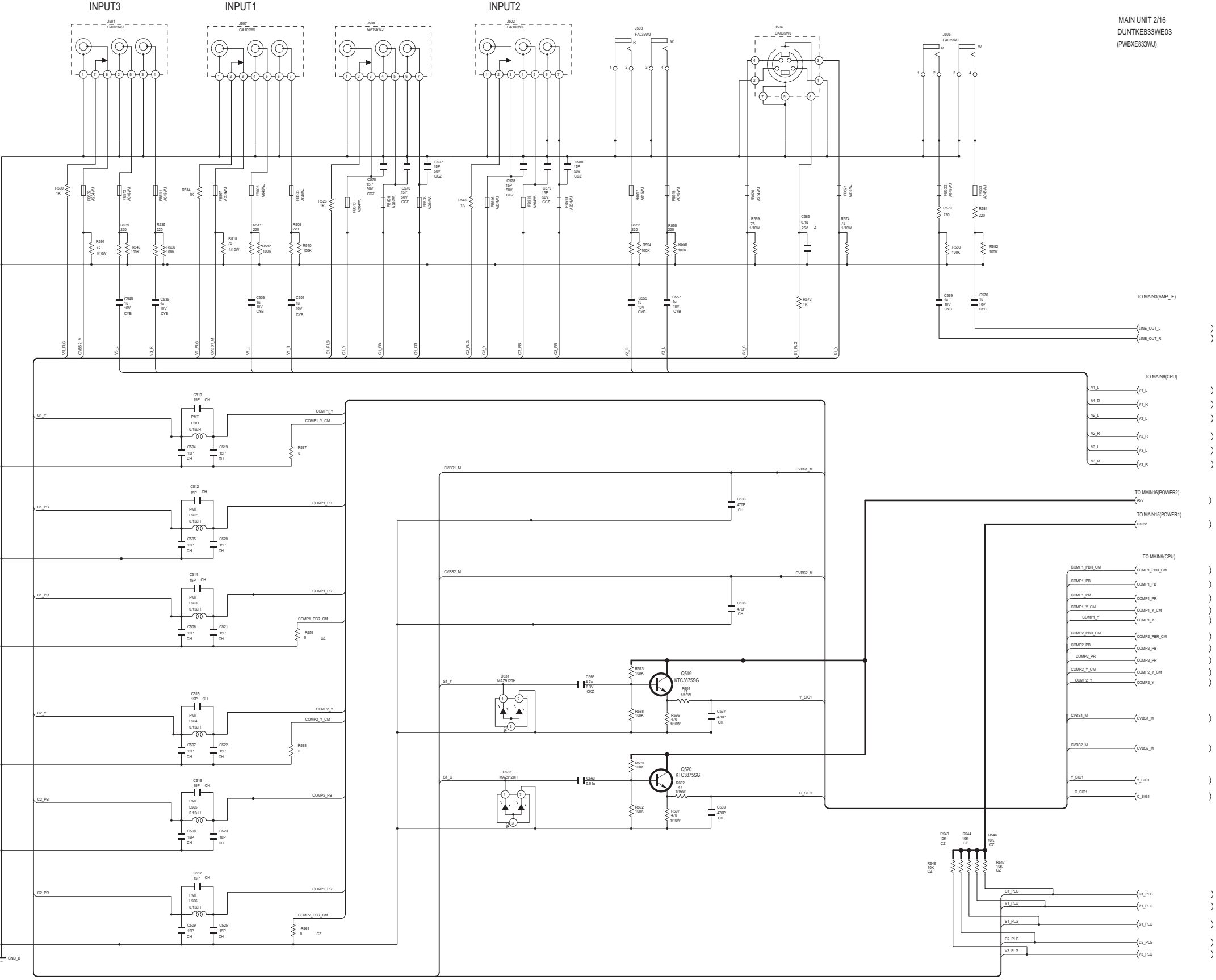
[3] MAIN Unit



MAIN Unit (2/16)

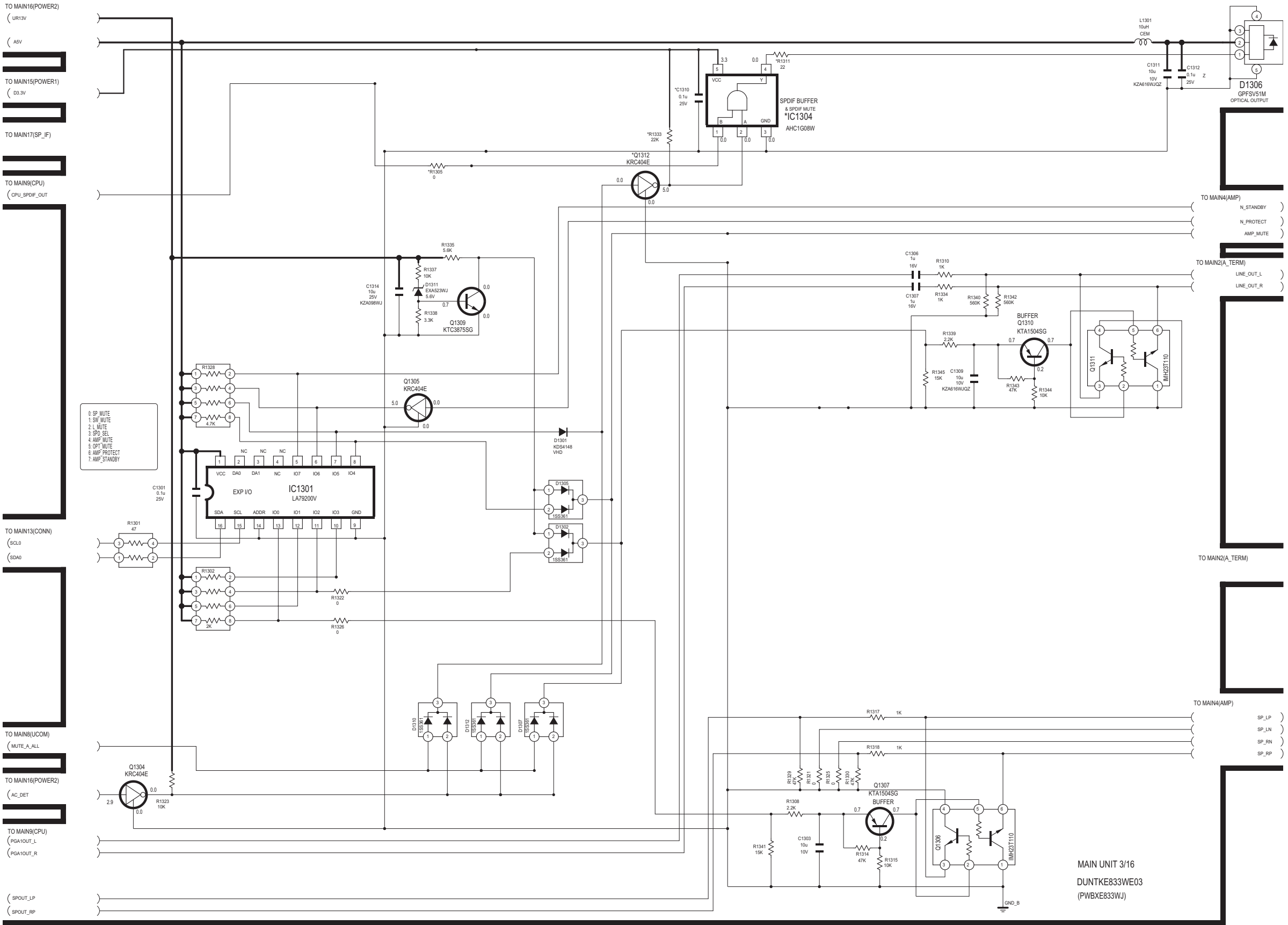
MAIN2(A_TERM)

MAIN UNIT 2/16
DUNTKE833WE03
(PWBXE833WJ)



MAIN Unit (3/16)

MAIN3 (AMP IF)

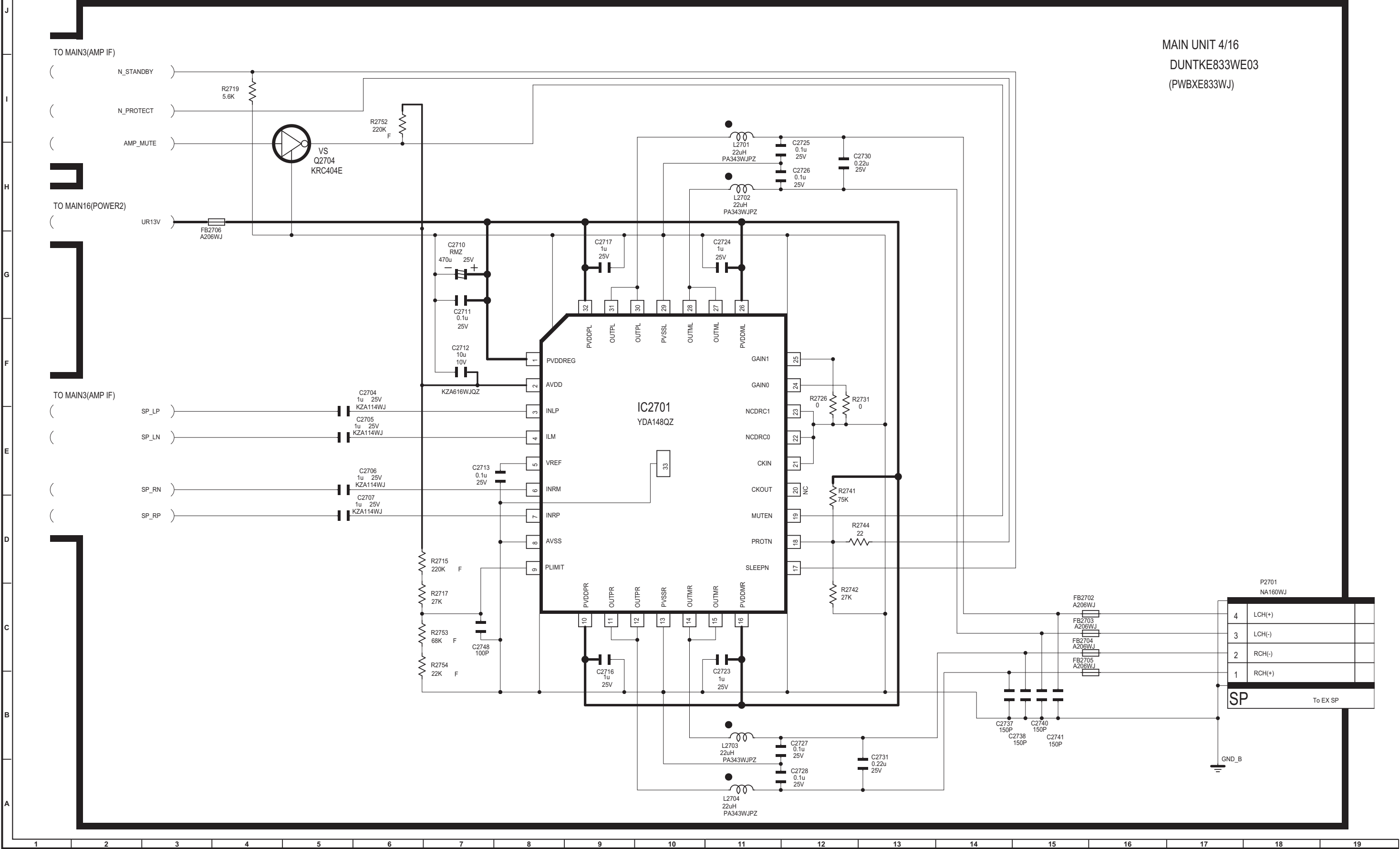


MAIN UNIT 3/16
DUNTKE833WE03
(PWBXE833WJ)

MAIN Unit (4/16)

MAIN4(AMP)

MAIN UNIT 4/16
DUNTKE833WE03
(PWBXE833WJ)

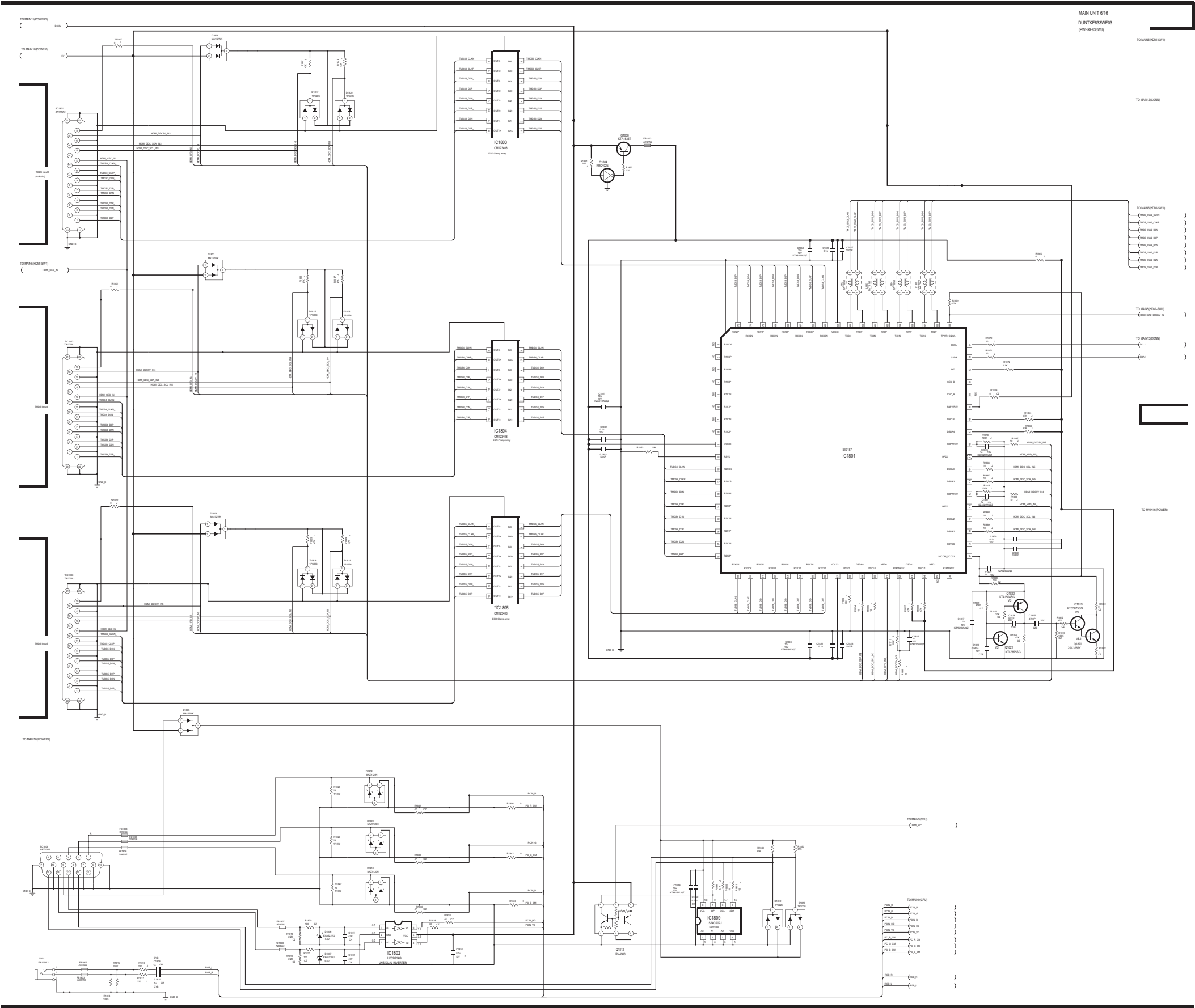


J



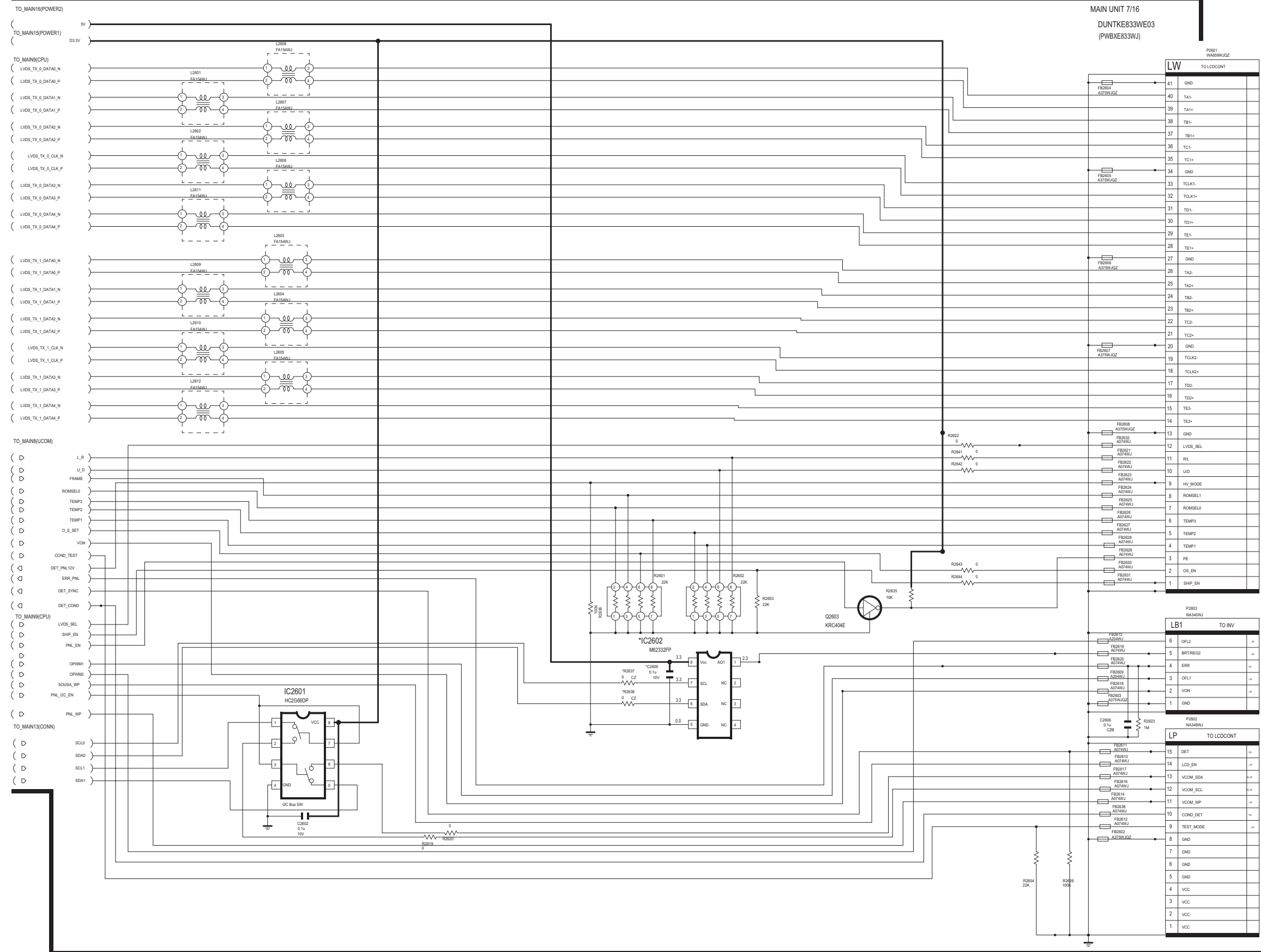
MAIN Unit (6/16)

MAIN6 (HDMI_SW2)



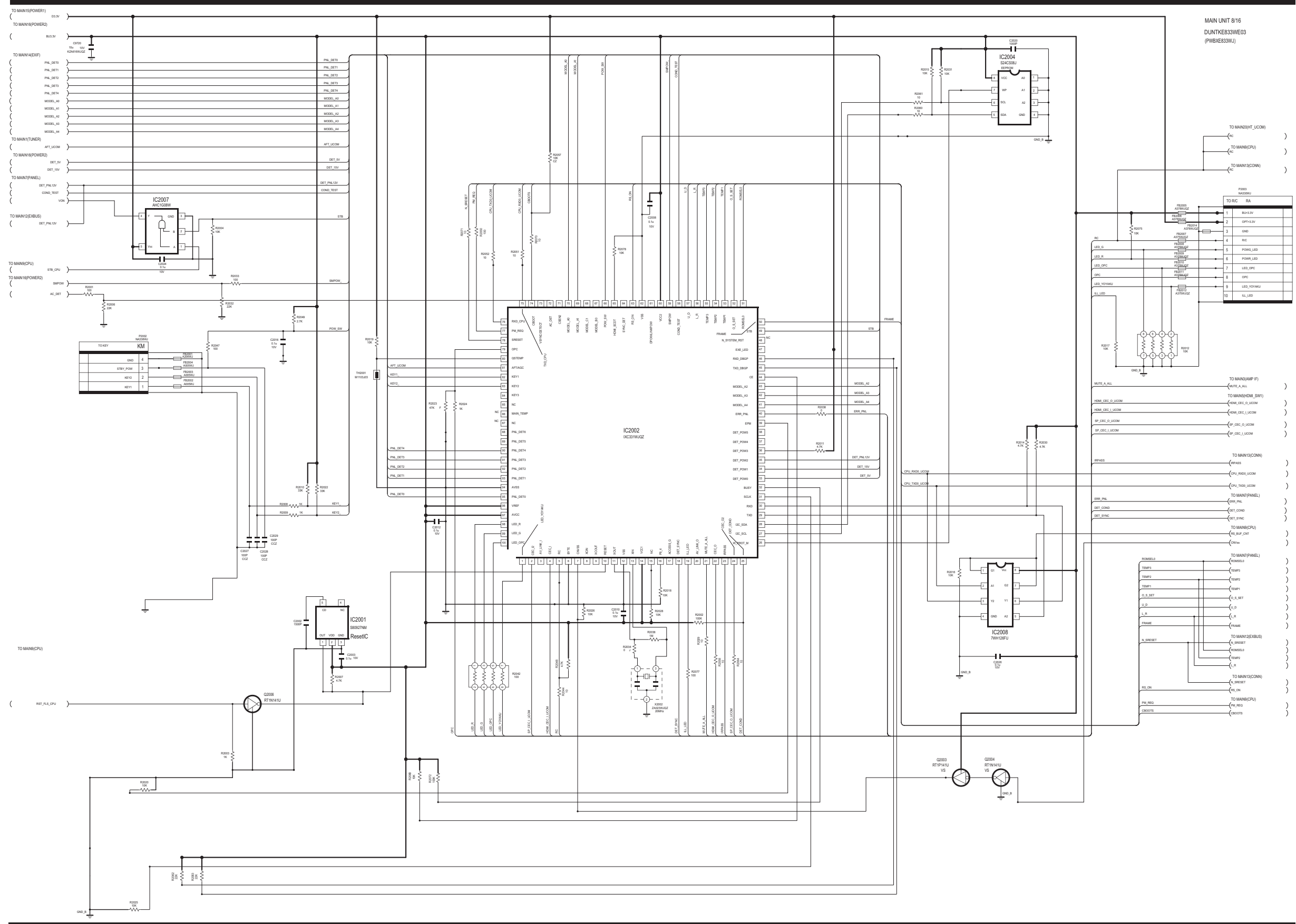
MAIN7 (PANEL)

MAIN Unit (7/16)



MAIN Unit (8/16)

MAIN8 (UCOM)



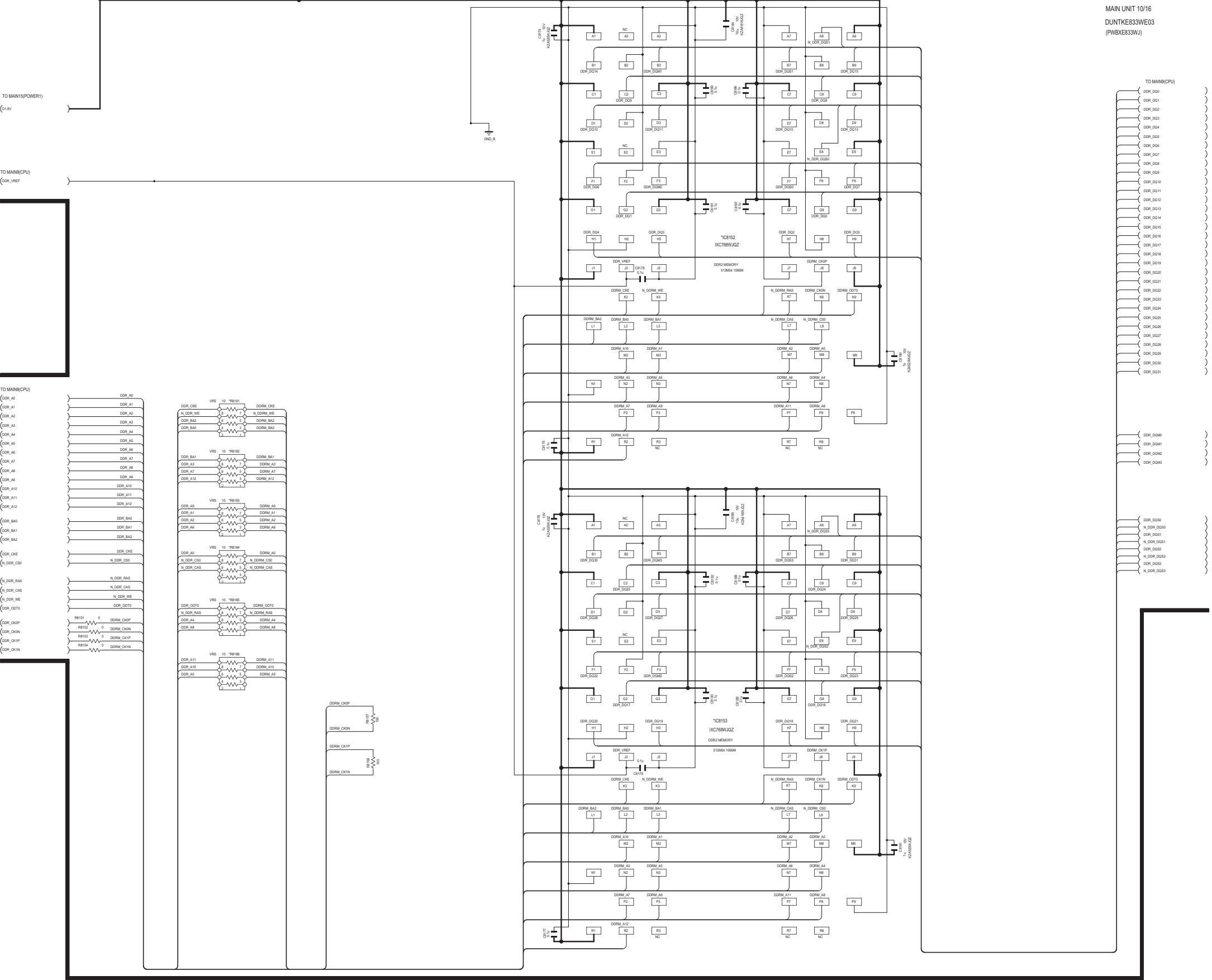
MAIN9 (CPU)



MAIN Unit (10/16)

MAIN10 (DDR)

MAIN UNIT 10/16
DUNTEK833WE03
(PWBE833WJ)



MAIN Unit (11/16)

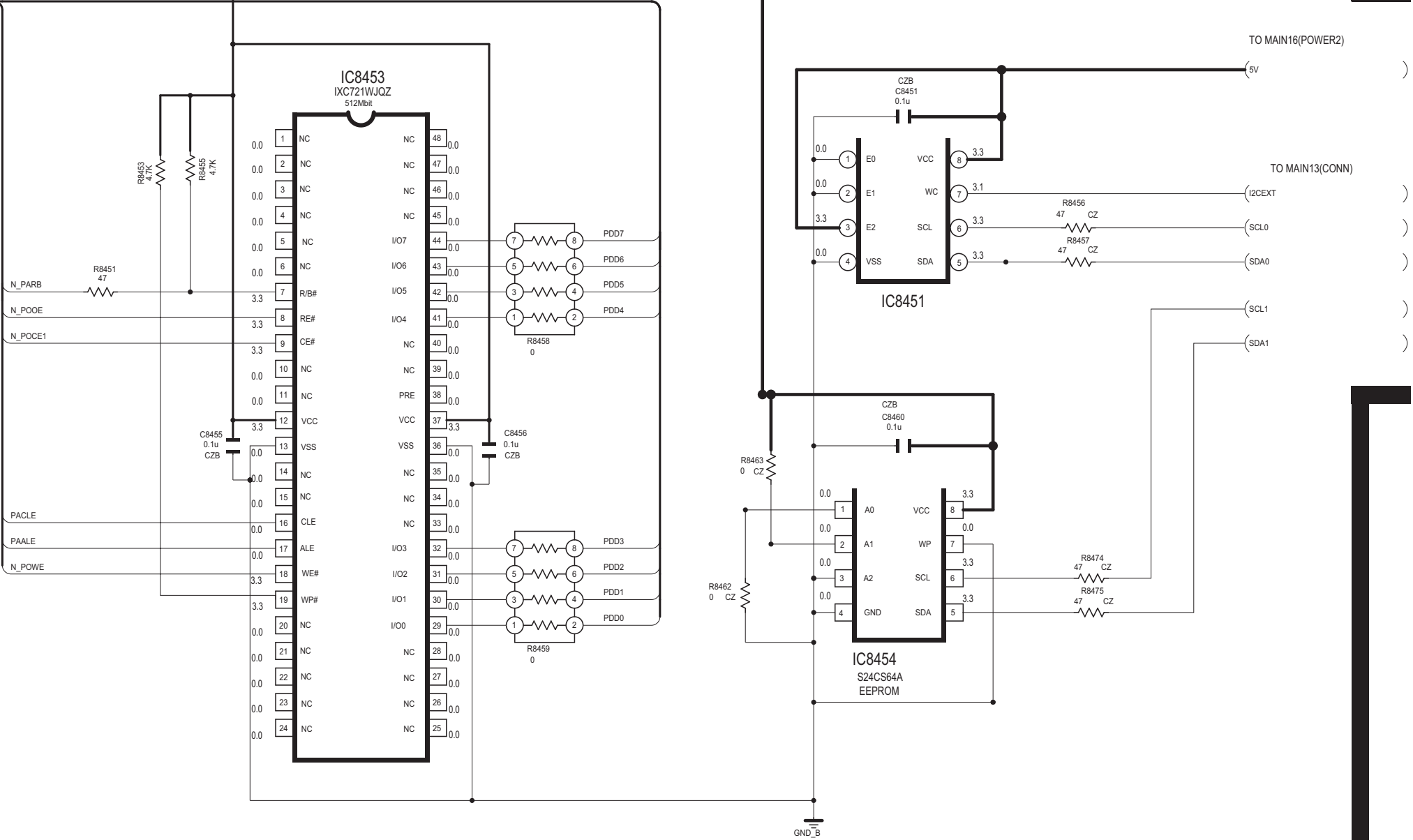
MAIN11 (EPROM)

MAIN UNIT 11/16
DUNTKE833WE03
(PWBXE833WJ)

TO MAIN15(POWER1)
(D3.3V)

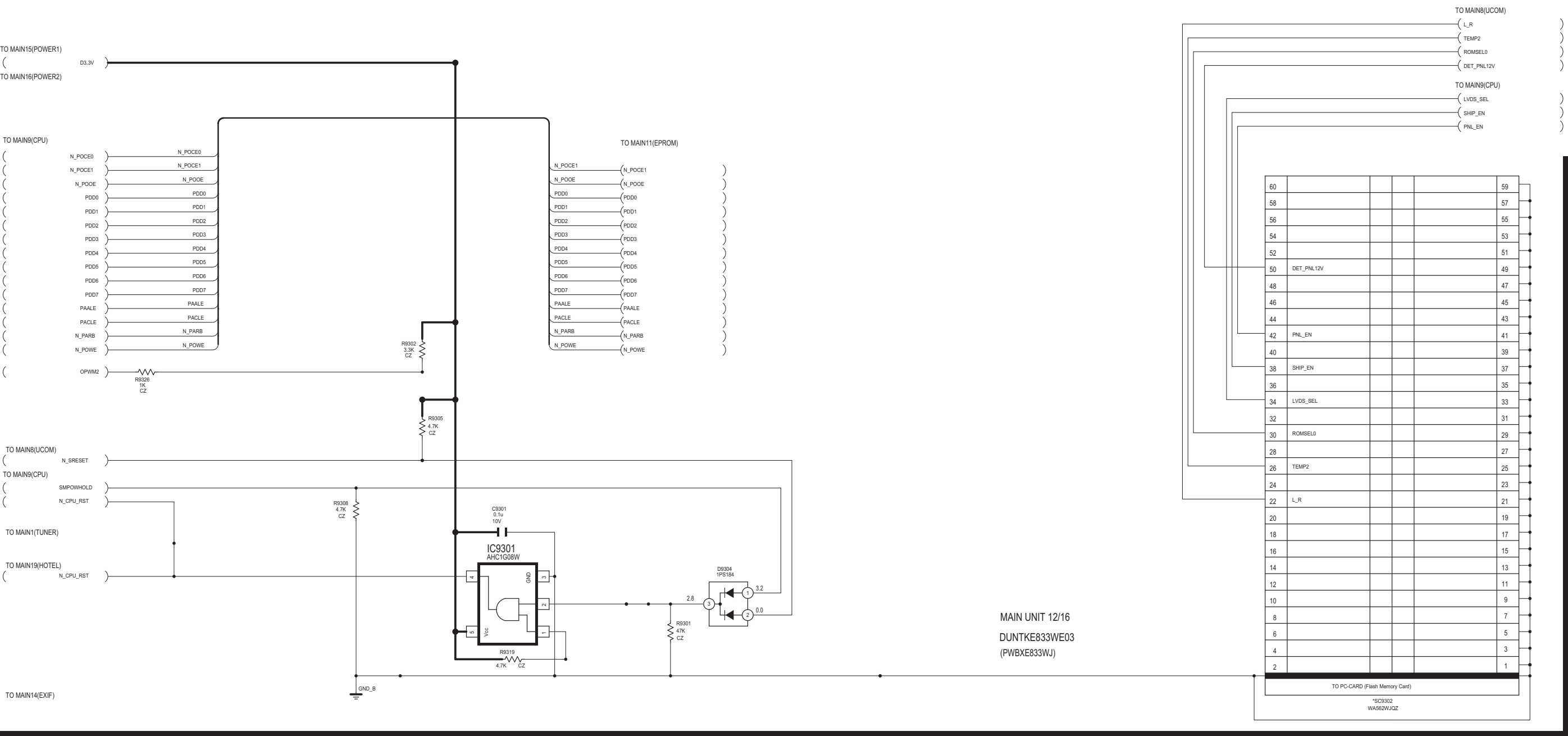
TO MAIN12(EXBUS)

N_POCE1	N_POCE1
N_POOE	N_POOE
PDD0	PDD0
PDD1	PDD1
PDD2	PDD2
PDD3	PDD3
PDD4	PDD4
PDD5	PDD5
PDD6	PDD6
PDD7	PDD7
PAALE	PAALE
PACLE	PACLE
N_PARB	N_PARB
N_POWE	N_POWE



MAIN Unit (12/16)

MAIN12 (EXBUS)



MAIN Unit (13/16)

MAIN13 (CONN)

MAIN UNIT 13/16
DUNTKE833WE03
(PWBXE833WJ)

TO MAIN15(POWER1)
(D3.3V)
TO MAIN16(POWER2)
(BU3.3V)
(5V)
(BUSV)

TO MAIN14(EXIF)
(CPU_TXD0_UCOM)
(CPU_RXD0_UCOM)
TO MAIN8(UCOM)
(CPU_TXD0_UCOM)
(CPU_RXD0_UCOM)

TO MAIN9(CPU)
(CPU_UARXD0_RS)
(CPU_UATXD0_UCOM)
(CPU_UARXD2_UCOM)
(CPU_UATXD2_UCOM)

TO MAIN8(UCOM)
(N_SRESET)

TO MAIN9(CPU)
(TUN_SCL)
(TUN_SDA)

(SCL0)
(SDA0)

(SCL1)
(SDA1)

TO MAIN8(UCOM)
(IRPASS)

TO MAIN8(UCOM)
(RC)

TO MAIN9(CPU)
(ICEXT)

TO MAIN11(EPROM)
(ICEXT)

(SCL0)
(SDA0)

TO MAIN5(HDMI_SW2)
(SCL0)
(SDA0)

TO MAIN7(PANEL)
(SCL0)
(SDA0)

TO MAIN3(AMP_IF)
(SCL0)
(SDA0)

TO MAIN1(TUNER)
(TUN_SCL)
(TUN_SDA)

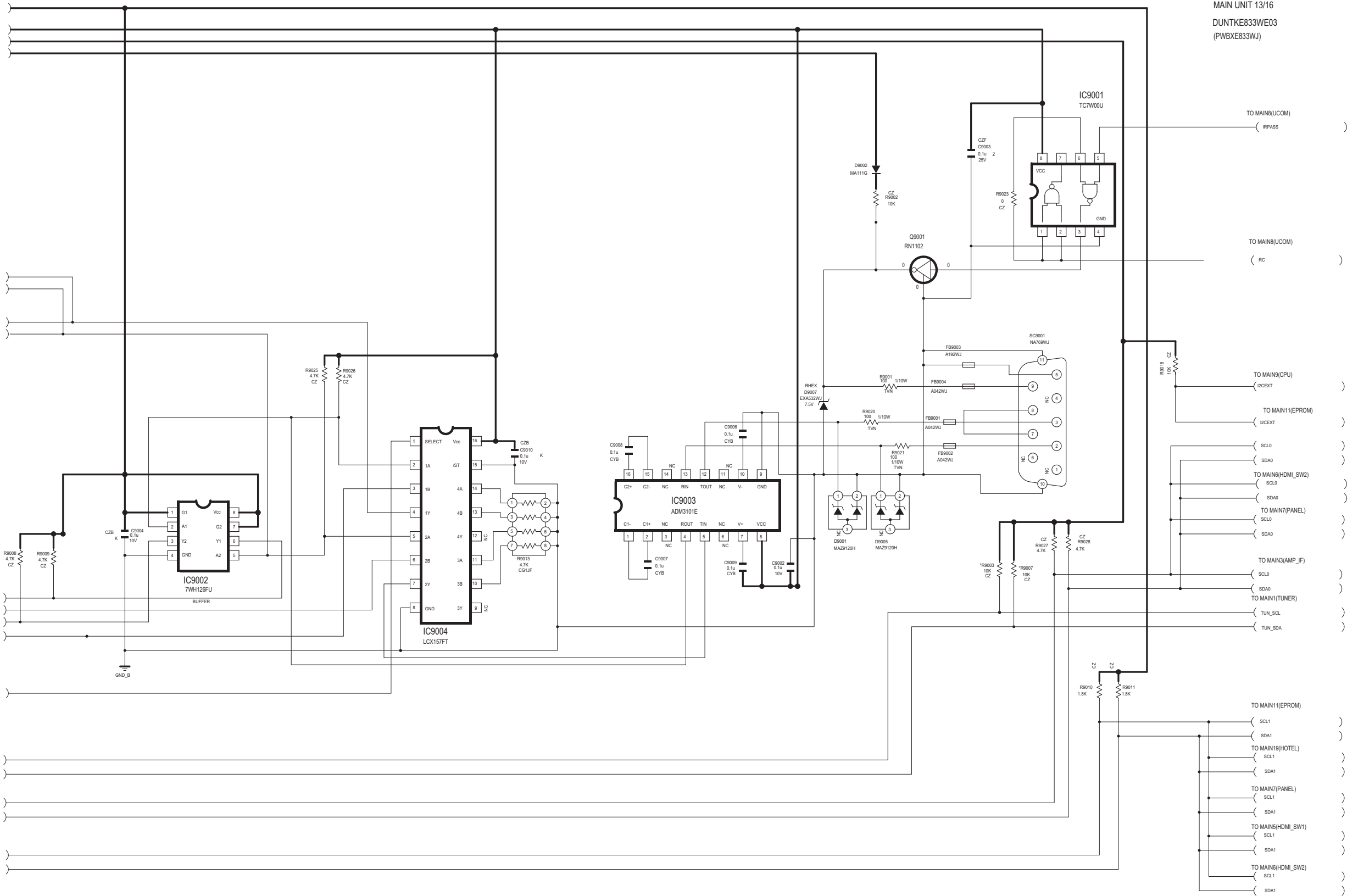
TO MAIN11(EPROM)
(SCL1)
(SDA1)

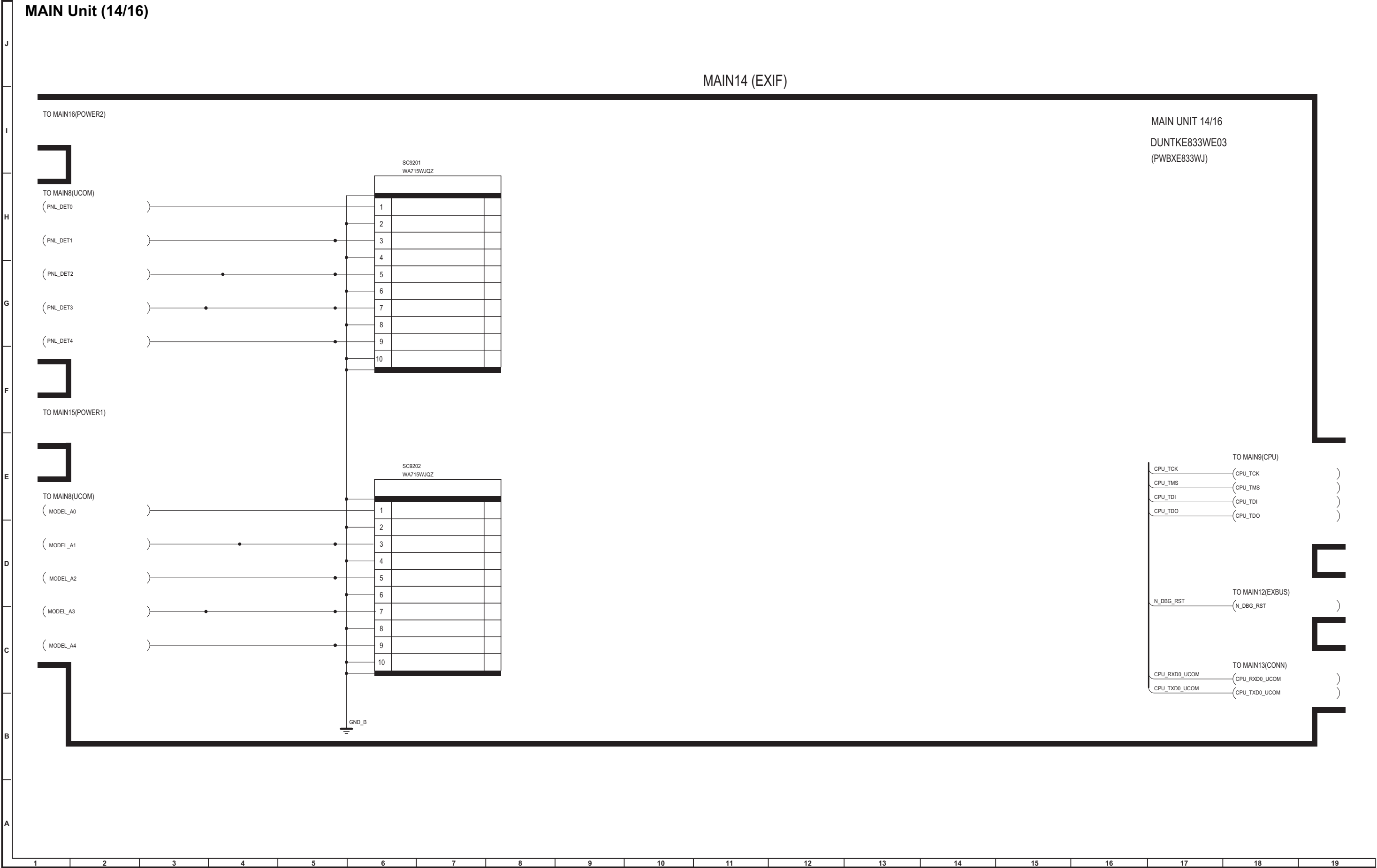
TO MAIN19(HOTEL)
(SCL1)
(SDA1)

TO MAIN7(PANEL)
(SCL1)
(SDA1)

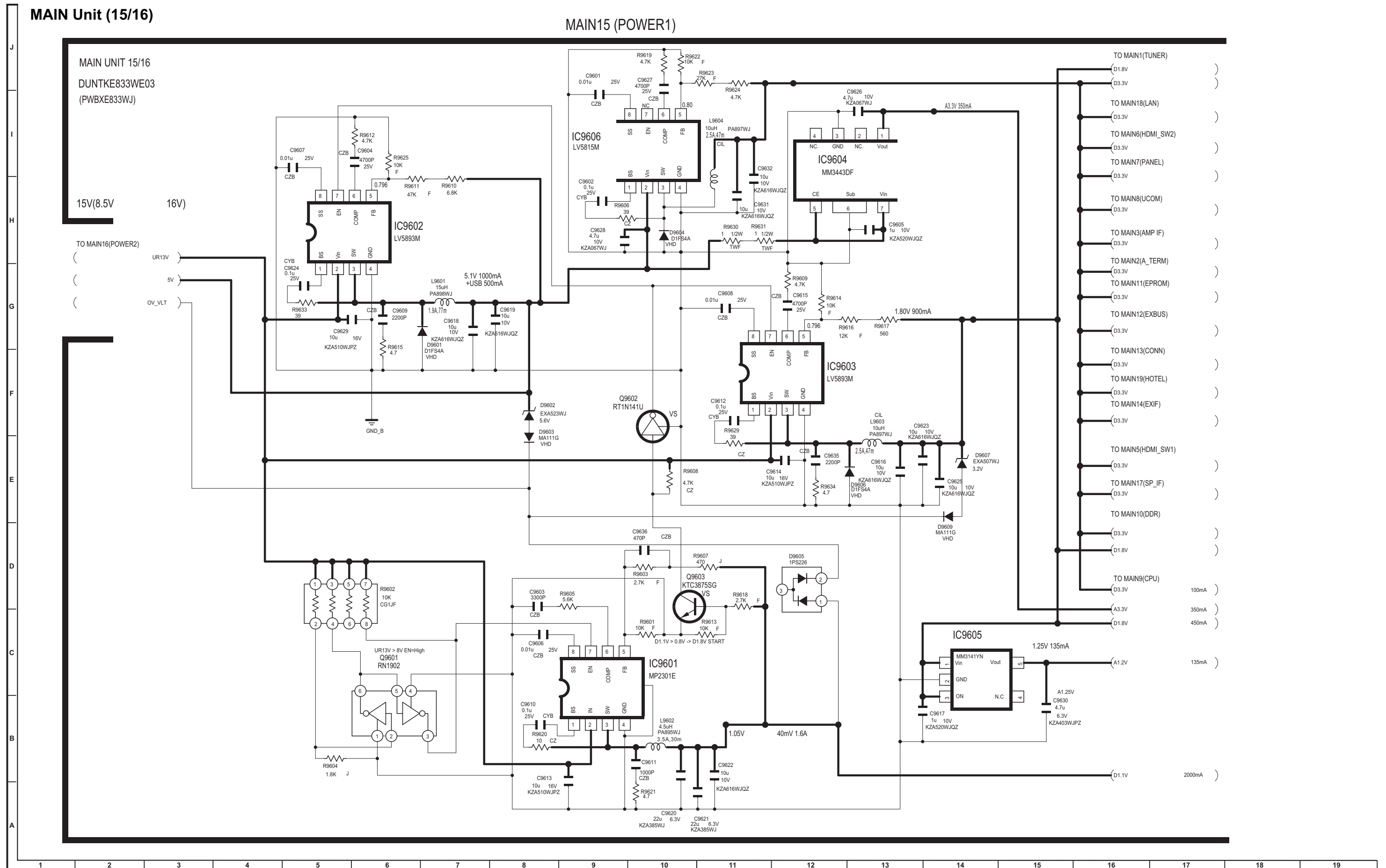
TO MAIN5(HDMI_SW1)
(SCL1)
(SDA1)

TO MAIN6(HDMI_SW2)
(SCL1)
(SDA1)



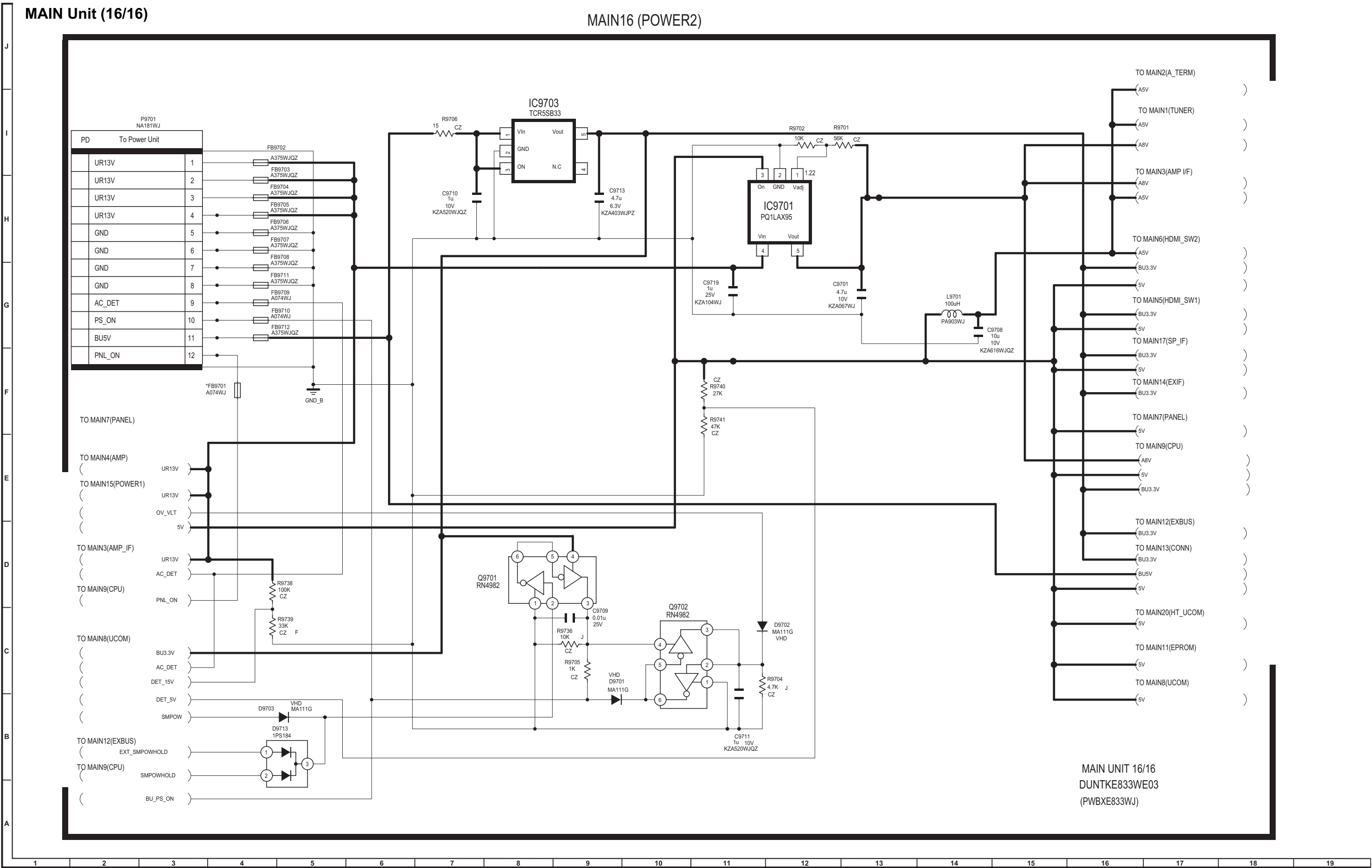


MAIN15 (POWER1)

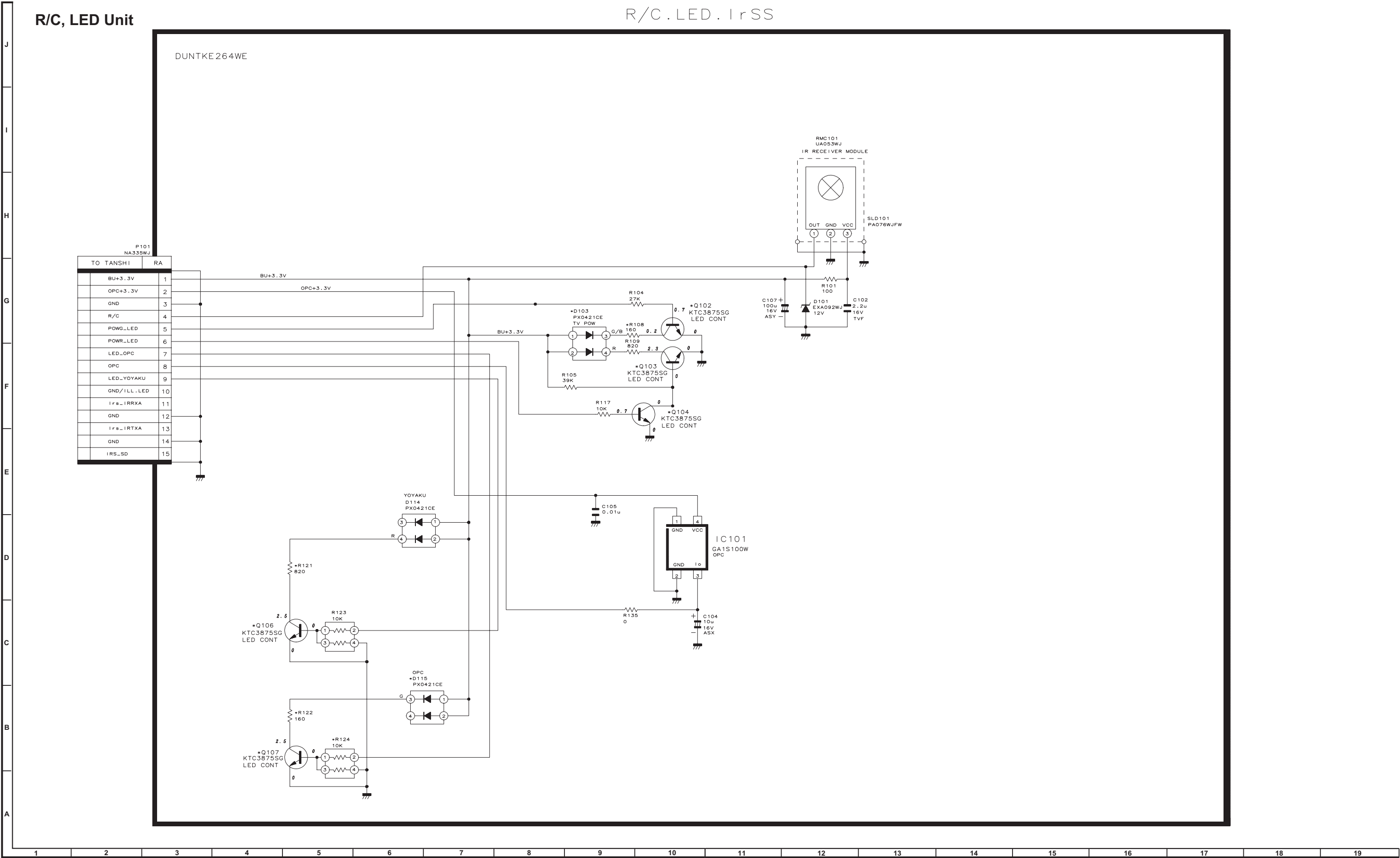


MAIN Unit (16/16)

MAIN16 (POWER2)



[4] R/C, LED Unit



SHARP PARTS GUIDE

No. S49Y6LC46SB57



LCD COLOR TELEVISION

LC-46SB57U

MODELS LC-52SB57U

CONTENTS

- | | |
|---|--|
| [1] PRINTED WIRING BOARD ASSEMBLIES | [8] CABINET AND MECHANICAL PARTS (LC-52SB57U) |
| [2] LCD PANEL | [9] LCD MODULE Assembly (LC-52SB57U) |
| [3] DUNTKE833FM05 (MAIN Unit) | [10] SUPPLIED ACCESSORIES |
| [4] DUNTKE264FM02 (R/C, LED Unit) | [11] PACKING PARTS (LC-46SB57U) (NOT REPLACEMENT ITEM) |
| [5] DUNTKE266FM02 (KEY Unit) | [12] PACKING PARTS (LC-52SB57U) (NOT REPLACEMENT ITEM) |
| [6] CABINET AND MECHANICAL PARTS (LC-46SB57U) | [13] SERVICE JIG (USE FOR SERVICING) |
| [7] LCD MODULE Assembly (LC-46SB57U) | |

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[1] PRINTED WIRING BOARD ASSEMBLIES					
N	DUNTKE833FM05	CB	N	X	MAIN Unit (DUNTKE833FM05S)
N	DUNTKE264FM02	AP		X	R/C, LED Unit
N	DUNTKE266FM02	AH		X	KEY Unit
N	RDENCA336WJQZ	BR		X	POWER Unit
N	CPWBX4023TPXA	BW	N	J	LCD Control Unit (LC-46SB57U)
N	CPWBX4023TPXZ	BW	N	J	LCD Control Unit (LC-52SB57U)
N	RUNTKA538WJN1	BF	N	J	INVERTER Unit-1 (LC-46SB57U)
N	RUNTKA528WJN1	BF	N	J	INVERTER Unit-1 (LC-52SB57U)
N	RUNTKA539WJN1	BF	N	J	INVERTER Unit-2 (LC-46SB57U)
N	RUNTKA529WJN1	BF	N	J	INVERTER Unit-2 (LC-52SB57U)
N	RUNTKA540WJZZ	AP	N	J	INVERTER GND Unit-1 (LC-46SB57U)
N	RUNTKA530WJZZ	AP	N	J	INVERTER GND Unit-1 (LC-52SB57U)
N	RUNTKA541WJZZ	AP	N	J	INVERTER GND Unit-2 (LC-46SB57U)
N	RUNTKA531WJZZ	AP	N	J	INVERTER GND Unit-2 (LC-52SB57U)
[2] LCD PANEL					
N	R1LK460D3LW80Z	EL		X	46" LCD Panel Module Unit (LK460D3LW80Z2)
N	R1LK520D3LW80Z	EY		X	52" LCD Panel Module Unit (LK520D3LW80Z2)
[3] DUNTKE833FM05 (MAIN Unit)					
C501	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C503	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C504	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C505	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C506	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C507	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C508	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C509	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C510	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C512	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C514	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C515	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C516	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C517	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C519	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C520	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C521	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C522	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C523	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C525	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C533	VCCCCZ1HH471JY	AA		J	Capacitor 470p 50V Ceramic
C535	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C536	VCCCCZ1HH471JY	AA		J	Capacitor 470p 50V Ceramic
C537	VCCCCZ1HH471JY	AA		J	Capacitor 470p 50V Ceramic
C539	VCCCCZ1HH471JY	AA		J	Capacitor 470p 50V Ceramic
C540	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C555	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C557	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C563	VCKYCY1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C565	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C566	RC-KZA403WJPZY	AB		J	Capacitor 4.7 6.3V Ceramic
C569	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C570	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C575	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C576	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C577	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C578	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C579	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C580	VCCCCZ1HH150JY	AB		J	Capacitor 15p 50V Ceramic
C1101	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1102	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1107	VCKYCY1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1112	RC-KZA510WJPZY	AB		J	Capacitor 10 16V Ceramic
C1116	VCKYCY1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1119	VCKYCY1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C1124	VCKYCY1EB472KY	AB		J	Capacitor 4700p 25V Ceramic
C1125	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C1126	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C1129	VCKYCY1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1130	VCKYCY1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1131	VCAAPE1AJ686MY	AE		J	Capacitor 68 10V Electrolytic
C1134	VCAAPE1AJ686MY	AE		J	Capacitor 68 10V Electrolytic
C1301	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1303	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1306	VCKYTV1CB105KY	AC		J	Capacitor 1 16V Ceramic
C1307	VCKYTV1CB105KY	AC		J	Capacitor 1 16V Ceramic
C1309	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1310	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1311	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1312	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1314	RC-KZA098WJZZY	AD		J	Capacitor 10 25V Ceramic
C1602	VCKYCY1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1603	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1604	VCKYCY1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C1605	VCKYCY1EB103KY	AA		J	Capacitor 0.01 25V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
C1613	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1614	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1615	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1616	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1617	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1618	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1619	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1620	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1621	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1622	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1623	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1624	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1625	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1626	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1627	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1628	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1629	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1634	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1635	VCKYCZ1EB472KY	AB		J	Capacitor 4700p 25V Ceramic
C1801	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1802	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1803	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1804	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1809	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C1810	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C1811	VCCCCZ1HH470JY	AB		J	Capacitor 47p 50V Ceramic
C1812	VCCCCZ1HH470JY	AB		J	Capacitor 47p 50V Ceramic
C1814	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1815	VCKYCZ1EB472KY	AB		J	Capacitor 4700p 25V Ceramic
C1817	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1819	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C1825	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1826	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1827	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1828	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1829	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1830	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1835	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1836	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1837	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1838	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1842	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C1849	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C1850	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1852	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C2002	VCKYCZ1HB152KY	AB		J	Capacitor 1500p 50V Ceramic
C2003	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2008	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2010	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2012	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2016	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2020	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C2024	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2026	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2027	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C2028	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C2029	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C2602	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2606	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2609	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2704	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2705	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2706	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2707	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2710	VCERMZ1EN477MY	AE		J	Capacitor 470 25V Capacitor(AL)
C2711	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C2712	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C2713	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C2716	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2717	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2723	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2724	RC-KZA114WJZZY	AB		J	Capacitor 1 25V Ceramic
C2725	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C2726	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C2727	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C2728	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C2730	VCKYTV1EB224KY	AA		J	Capacitor 0.22 25V Ceramic
C2731	VCKYTV1EB224KY	AA		J	Capacitor 0.22 25V Ceramic
C2737	VCCCCZ1HH151JY	AB		J	Capacitor 150p 50V Ceramic
C2738	VCCCCZ1HH151JY	AB		J	Capacitor 150p 50V Ceramic
C2740	VCCCCZ1HH151JY	AB		J	Capacitor 150p 50V Ceramic
C2741	VCCCCZ1HH151JY	AB		J	Capacitor 150p 50V Ceramic
C2748	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C8001	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8002	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
C8003	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8004	RC-KZA067WJZZY	AB		J	Capacitor 4.7 10V Ceramic
C8005	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8006	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8007	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8008	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8009	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8010	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8011	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8012	VCCCCZ1HH120GY	AA		J	Capacitor 12p 50V Ceramic
C8013	VCCCCZ1HH100DY	AB		J	Capacitor 10p 50V Ceramic
C8016	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C8017	RC-KZA531WJQZY	AA		J	Capacitor 1 10V Ceramic
C8018	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C8019	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C8020	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C8021	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C8022	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C8023	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8024	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8025	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8026	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8027	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8028	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8029	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8030	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8031	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8032	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8033	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8034	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8035	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8036	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8037	VCKYTV1CB105KY	AC		J	Capacitor 1 16V Ceramic
C8038	VCKYTV1CB105KY	AC		J	Capacitor 1 16V Ceramic
C8039	RC-KZA067WJZZY	AB		J	Capacitor 4.7 10V Ceramic
C8040	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8041	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8042	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8043	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8044	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8045	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8046	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8051	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8052	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8053	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8054	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8055	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8056	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8057	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8058	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8059	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8060	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8061	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8062	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8063	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8064	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8065	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8066	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8067	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8068	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8069	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8070	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8071	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8072	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8073	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8074	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8075	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8076	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8077	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8078	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8079	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8080	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8081	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C8082	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C8083	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C8084	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C8085	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C8086	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8087	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8088	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8089	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8090	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C8091	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8092	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C8093	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
C8094	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8095	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C8096	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C8097	VCKYTV1CB105KY	AC		J	Capacitor 1 16V Ceramic
C8098	VCKYCZ1HB471KY	AB		J	Capacitor 470p 50V Ceramic
C8099	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8100	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8101	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8102	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8174	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C8175	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8176	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C8177	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8178	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8179	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8180	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8181	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8182	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8183	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8184	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8185	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C8186	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8187	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8188	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8189	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8190	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C8191	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C8451	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8455	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8456	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8460	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C9003	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9004	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C9006	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9007	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9008	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9009	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9010	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C9301	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C9601	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C9602	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9603	VCKYCZ1HB332KY	AA		J	Capacitor 3300p 50V Ceramic
C9604	VCKYCZ1EB472KY	AB		J	Capacitor 4700p 25V Ceramic
C9605	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C9606	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C9607	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C9608	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C9609	VCKYCZ1HB222KY	AB		J	Capacitor 2200p 50V Ceramic
C9610	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9611	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C9612	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9613	RC-KZA510WJPZY	AB		J	Capacitor 10 16V Ceramic
C9614	RC-KZA510WJPZY	AB		J	Capacitor 10 16V Ceramic
C9615	VCKYCZ1EB472KY	AB		J	Capacitor 4700p 25V Ceramic
C9616	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9617	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C9618	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9619	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9620	RC-KZA385WJZZY	AD		J	Capacitor 22 6.3V Ceramic
C9621	RC-KZA385WJZZY	AD		J	Capacitor 22 6.3V Ceramic
C9622	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9623	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9624	VCKYCY1EB104KY	AB		J	Capacitor 0.1 25V Ceramic
C9625	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9626	RC-KZA067WJZZY	AB		J	Capacitor 4.7 10V Ceramic
C9627	VCKYCZ1EB472KY	AB		J	Capacitor 4700p 25V Ceramic
C9628	RC-KZA067WJZZY	AB		J	Capacitor 4.7 10V Ceramic
C9629	RC-KZA510WJPZY	AB		J	Capacitor 10 16V Ceramic
C9630	RC-KZA403WJPZY	AB		J	Capacitor 4.7 6.3V Ceramic
C9631	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9632	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9635	VCKYCZ1HB222KY	AB		J	Capacitor 2200p 50V Ceramic
C9636	VCKYCZ1HB471KY	AB		J	Capacitor 470p 50V Ceramic
C9701	RC-KZA067WJZZY	AB		J	Capacitor 4.7 10V Ceramic
C9708	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
C9709	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C9710	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C9711	RC-KZA520WJQZY	AA		J	Capacitor 1 10V Ceramic
C9713	RC-KZA403WJPZY	AB		J	Capacitor 4.7 6.3V Ceramic
C9719	RC-KZA104WJZZY	AA		J	Capacitor 1 25V Ceramic
C9720	RC-KZA616WJQZY	AB		J	Capacitor 10 10V Ceramic
D531	VHDMAZ9120H-1Y	AC		J	Diode MAZ91200H0L
D532	VHDMAZ9120H-1Y	AC		J	Diode MAZ91200H0L
D1301	VHDKDS4148/-1Y	AA		J	Diode KDS4148U-RTK/P
D1302	VHD1SS361/-1Y	AB		J	Diode 1SS361(T5L,F,T)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
D1305	VHD1SS361//--1Y	AB		J	Diode 1SS361(T5L,F,T)
D1306	VHGPFSV51M-1	AG		J	Diode Photodiode
D1307	VHD1SS361//--1Y	AB		J	Diode 1SS361(T5L,F,T)
D1310	VHD1SS361//--1Y	AB		J	Diode 1SS361(T5L,F,T)
D1311	RH-EXA523WJZZY	AB		J	Diode MAZ8056GML
D1312	VHD1SS361//--1Y	AB		J	Diode 1SS361(T5L,F,T)
D1601	VHDB520S30-1Y	AC		J	Diode RB520S-30TE61
D1602	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1603	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1606	RH-EXA523WJZZY	AB		J	Diode MAZ8056GML
D1607	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1608	VHDMA152WK/-1Y	AB		J	Diode MA152WK-(TX)
D1609	VHDMA152WK/-1Y	AB		J	Diode MA152WK-(TX)
D1610	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1804	VHDMA152WK/-1Y	AB		J	Diode MA152WK-(TX)
D1805	VHDMA152WK/-1Y	AB		J	Diode MA152WK-(TX)
D1806	RH-EXA523WJZZY	AB		J	Diode MAZ8056GML
D1807	RH-EXA523WJZZY	AB		J	Diode MAZ8056GML
D1808	VHDMAZ9120H-1Y	AC		J	Diode MAZ91200H0L
D1809	VHDMAZ9120H-1Y	AC		J	Diode MAZ91200H0L
D1810	VHDMAZ9120H-1Y	AC		J	Diode MAZ91200H0L
D1811	VHDMA152WK/-1Y	AB		J	Diode MA152WK-(TX)
D1812	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1813	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1814	VHDMA152WK/-1Y	AB		J	Diode MA152WK-(TX)
D1815	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1816	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1817	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1818	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1819	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D1820	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D2504	VHDB520S30-1Y	AC		J	Diode RB520S-30TE61
D2505	VHDMA152WK/-1Y	AB		J	Diode MA152WK-(TX)
D8001	RH-PXA018WJZZY	AC		J	Diode GM1HD55200A
D9001	VHDMAZ9120H-1Y	AC		J	Diode MAZ91200H0L
D9002	VHDMA111G+-1Y	AA		J	Diode MA2J1110GL
D9005	VHDMAZ9120H-1Y	AC		J	Diode MAZ91200H0L
D9007	RH-EXA532WJZZY	AA		J	Diode MAZ8075GML
D9304	VHD1PS184++-1Y	AB		J	Diode 1PS184,115
D9601	VHDD1FS4A+-1Y	AC		J	Diode D1FS4A-5063
D9602	RH-EXA523WJZZY	AB		J	Diode MAZ8056GML
D9603	VHDMA111G+-1Y	AA		J	Diode MA2J1110GL
D9604	VHDD1FS4A+-1Y	AC		J	Diode D1FS4A-5063
D9605	VHD1PS226++-1Y	AB		J	Diode 1PS226,115
D9606	VHDD1FS4A+-1Y	AC		J	Diode D1FS4A-5063
D9607	RH-EXA507WJZZY	AA		J	Diode MAZ8033GLL
D9609	VHDMA111G+-1Y	AA		J	Diode MA2J1110GL
D9701	VHDMA111G+-1Y	AA		J	Diode MA2J1110GL
D9702	VHDMA111G+-1Y	AA		J	Diode MA2J1110GL
D9703	VHDMA111G+-1Y	AA		J	Diode MA2J1110GL
D9713	VHD1PS184++-1Y	AB		J	Diode 1PS184,115
FB502	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB505	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB506	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB507	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB508	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB509	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB510	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB511	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB512	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB513	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB515	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB516	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB517	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB518	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB520	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB521	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB522	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB523	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB1101	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB1102	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB1605	RBLN-A192WJZZY	AA		J	Ferrite Bead
FB1802	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB1803	RBLN-A045WJZZY	AB		J	Ferrite Bead
FB1804	RBLN-0093GEZZY	AB		J	Ferrite Bead
FB1805	RBLN-0093GEZZY	AB		J	Ferrite Bead
FB1806	RBLN-0093GEZZY	AB		J	Ferrite Bead
FB1807	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB1808	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB1812	RBLN-A192WJZZY	AA		J	Ferrite Bead
FB2001	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB2002	RBLN-A005WJZZY	AA		J	Ferrite Bead
FB2003	RBLN-A005WJZZY	AA		J	Ferrite Bead
FB2004	RBLN-A005WJZZY	AA		J	Ferrite Bead
FB2005	RBLN-A378WJQZY	AA		J	Ferrite Bead

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
FB2006	RBLN-A378WJQZY	AA		J	Ferrite Bead
FB2007	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2008	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2009	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2010	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2011	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2012	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2014	RBLN-A378WJQZY	AA		J	Ferrite Bead
FB2508	RBLN-A192WJZZY	AA		J	Ferrite Bead
FB2602	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2603	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2604	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2605	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2606	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2607	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2608	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB2609	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB2610	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2611	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2612	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2613	RBLN-A204WJZZY	AA		J	Ferrite Bead
FB2614	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2616	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2617	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2618	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2619	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2620	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2621	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2622	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2623	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2624	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2625	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2626	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2627	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2628	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2629	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2630	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2631	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2632	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2638	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB2702	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB2703	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB2704	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB2705	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB2706	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB8001	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB8002	RBLN-A206WJZZY	AA		J	Ferrite Bead
FB9001	RBLN-A042WJZZY	AB		J	Ferrite Bead
FB9002	RBLN-A042WJZZY	AB		J	Ferrite Bead
FB9003	RBLN-A192WJZZY	AA		J	Ferrite Bead
FB9004	RBLN-A042WJZZY	AB		J	Ferrite Bead
FB9701	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB9702	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9703	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9704	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9705	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9706	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9707	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9708	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9709	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB9710	RBLN-A074WJZZY	AA		J	Ferrite Bead
FB9711	RBLN-A375WJQZY	AA		J	Ferrite Bead
FB9712	RBLN-A375WJQZY	AA		J	Ferrite Bead
IC1301	VHILA79200V-1Y	AF		J	IC LA79200V-TLM-E
IC1304	VHIAHC1G08W-1Y	AD		J	IC 74AHC1G08GW/G,125
IC1601	VHICM123408-1Y	AE		J	IC CM1234-08DE
IC1602	VHICM123408-1Y	AE		J	IC CM1234-08DE
IC1603	VHITC7SH17U-1Y	AC		J	IC TC7SH17FU(TE85L,F)
IC1605	VHISI9187+-1Q	AN		J	IC SI9187CNU
IC1606	VHITC7SH17U-1Y	AC		J	IC TC7SH17FU(TE85L,F)
IC1607	VHILCX125FT-1Y	AD		J	IC TC74LCX125FT(EL,K)
IC1801	VHISI9187+-1Q	AN		J	IC SI9187CNU
IC1802	VHILVC2G14G-1Y	AD		J	IC 74LVC2G14GW,125
IC1803	VHICM123408-1Y	AE		J	IC CM1234-08DE
IC1804	VHICM123408-1Y	AE		J	IC CM1234-08DE
IC1805	VHICM123408-1Y	AE		J	IC CM1234-08DE
IC1809	VHIS24CS02JHES			J	IC S-24CS02AFJ-TB-G (RGB EDID)
IC2001	VHIS80927NM-1Y	AC		J	IC S-80927CNMC-G8XT2G
IC2002	RH-IXC331WJNLQ	AS		J	IC R5F364V6NFB#U0 (MONITOR MICON)
IC2004	VHIS24CS08J-1Y	AE		J	IC S-24CS08AFJ-TB-1G
IC2007	VHIAHC1G08W-1Y	AD		J	IC 74AHC1G08GW/G,125
IC2008	VH17WH126FU-1Y	AE		J	IC TC7WH126FU(TE12L,F)
IC2601	VH1HC2G66DP-1Y	AD		J	IC 74HC2G66DP,125
IC2602	VH1M62332FP-1Y	AL		J	IC M62332FPCF5J
IC2701	VH1YDA148QZ-1Y	AL	N	J	IC YDA148-QZE2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
IC8001	RH-iXC579WJQZQ	BL	N	J	IC MT5391UFMJ
IC8002	VHiBD6538G+-1Y	AD		J	IC BD6538G-TR
IC8152	RH-iXC768WJQZQ	AU	N	X	IC H5PS5162FFR-G7C
IC8153	RH-iXC768WJQZQ	AU	N	X	IC H5PS5162FFR-G7C
IC8451	RH-iXC622WJQZY	AF	N	J	IC 24LC04BT-I/SN-MT
IC8453	RH-iXC721WJN1Q	AU	N	J	IC HY27US08121B-TPCB (PROGRAM IC)
IC8454	VHiS24CS64A-1Y	AF		J	IC S-24CS64AOI-J8T1G
IC9001	VHiTC7W00U/-1Y	AE		J	IC TC7W00FU(TE12L,F)
IC9002	VHi7WH126FU-1Y	AE		J	IC TC7WH126FU(TE12L,F)
IC9003	VHiADM3101E-1Y	AF		J	IC ADM3101EARQZ-REEL
IC9004	VHiLCX157FT-1Y	AD		J	IC TC74LCX157FT(EKJ)
IC9301	VHiAHC1G08W-1Y	AD		J	IC 74AHC1G08GW/G,125
IC9601	VHiMP2301E+-1Y	AF		J	IC MP2301ENE-LF-Z
IC9602	VHiLV5893M+-1Y	AE		J	IC LV5893M-TE-L-E
IC9603	VHiLV5893M+-1Y	AE		J	IC LV5893M-TE-L-E
IC9604	VHiMM3443DF-1Y	AD		J	IC MM3443DFBE
IC9605	VHiMM3141YN-1Y	AC		J	IC MM3141YNRE
IC9606	VHiLV5815M+-1Y	AF		J	IC LV5815M-TE-L-E
IC9701	VHiPQ1LAX95-1Y	AD		J	IC PQ1LAX95MSPQ
IC9703	VHiTCR5SB33-1Y	AC		J	IC TCR5SB33(TE85L,F)
J501	QJAKGA079WJZZ	AD		J	Jack
J502	QJAKGA108WJZZ	AE		J	Jack
J503	QJAKFA039WJZZ	AD		J	Jack
J504	QSOCDA035WJZZ	AD		J	Jack
J505	QJAKFA039WJZZ	AD		J	Jack
J507	QJAKGA109WJZZ	AE		J	Jack
J508	QJAKGA108WJZZ	AE		J	Jack
J1801	QJAKEA103WJZZ	AD	N	J	Jack
J8001	QSOCZA172WJQZ	AD		J	Jack
L501	VPMTNR15JR25NY	AB		J	Peaking 0.15μH
L502	VPMTNR15JR25NY	AB		J	Peaking 0.15μH
L503	VPMTNR15JR25NY	AB		J	Peaking 0.15μH
L504	VPMTNR15JR25NY	AB		J	Peaking 0.15μH
L505	VPMTNR15JR25NY	AB		J	Peaking 0.15μH
L506	VPMTNR15JR25NY	AB		J	Peaking 0.15μH
L1106	VPCEM100MR70NY	AC		J	Peaking 10μH
L1301	VPCEM100MR70NY	AC		J	Peaking 10μH
L1601	RCiLFA116WJZZY	AE		J	Coil
L1602	RCiLFA116WJZZY	AE		J	Coil
L1603	RCiLFA116WJZZY	AE		J	Coil
L1604	RCiLFA116WJZZY	AE		J	Coil
L1802	RCiLFA116WJZZY	AE		J	Coil
L1803	RCiLFA116WJZZY	AE		J	Coil
L1804	RCiLFA116WJZZY	AE		J	Coil
L1805	RCiLFA116WJZZY	AE		J	Coil
L2601	RCiLFA154WJZZY	AC		J	Coil
L2602	RCiLFA154WJZZY	AC		J	Coil
L2603	RCiLFA154WJZZY	AC		J	Coil
L2604	RCiLFA154WJZZY	AC		J	Coil
L2605	RCiLFA154WJZZY	AC		J	Coil
L2606	RCiLFA154WJZZY	AC		J	Coil
L2607	RCiLFA154WJZZY	AC		J	Coil
L2608	RCiLFA154WJZZY	AC		J	Coil
L2609	RCiLFA154WJZZY	AC		J	Coil
L2610	RCiLFA154WJZZY	AC		J	Coil
L2611	RCiLFA154WJZZY	AC		J	Coil
L2612	RCiLFA154WJZZY	AC		J	Coil
L2701	RCiLPA343WJPZY	AD		J	Coil
L2702	RCiLPA343WJPZY	AD		J	Coil
L2703	RCiLPA343WJPZY	AD		J	Coil
L2704	RCiLPA343WJPZY	AD		J	Coil
L9601	RCiLPA898WJZZY	AC		J	Coil
L9602	RCiLPA895WJZZY	AD		J	Coil
L9603	RCiLPA897WJZZY	AD		J	Coil
L9604	RCiLPA897WJZZY	AD		J	Coil
L9701	RCiLPA903WJZZY	AC		J	Coil
LUG1101	QLUGHA006WJZZY	AC		J	Lug
LUG1102	QLUGHA006WJZZY	AC		J	Lug
LUG1103	QLUGHA006WJZZY	AC		J	Lug
LUG1104	QLUGHA006WJZZY	AC		J	Lug
LUG1105	QLUGHA006WJZZY	AC		J	Lug
LUG1106	QLUGHA006WJZZY	AC		J	Lug
LUG1107	QLUGHA006WJZZY	AC		J	Lug
LUG1108	QLUGHA006WJZZY	AC		J	Lug
LUG1109	QLUGHA006WJZZY	AC		J	Lug
LUG1110	QLUGHA006WJZZY	AC		J	Lug
LUG1114	QLUGHA006WJZZY	AC		J	Lug
LUG1115	QLUGHA006WJZZY	AC		J	Lug
P2002	QPLGNA338WJZZY	AD		J	Plug
P2003	QPLGNA330WJZZY	AD		J	Plug
P2601	QCNCWA659WJQZY	AH		J	Plug
P2602	QPLGNA349WJZZY	AE		J	Plug
P2603	QPLGNA340WJZZY	AC		J	Plug
P2701	QPLGNA160WJZZY	AD		J	Plug
P9701	QPLGNA181WJZZY	AF		J	Plug

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
Q519	VSKTC3875SG-1Y	AB		J	Transistor
Q520	VSKTC3875SG-1Y	AB		J	Transistor
Q1101	VSKTC3875SG-1Y	AB		J	Transistor
Q1102	VSKTC3875SG-1Y	AB		J	Transistor
Q1104	VSHN7G04FUA-1Y	AB	N	J	Transistor HN7G04FU-A(TE85L,F)
Q1304	VSKRC404E++-1Y	AB		J	Transistor KRC404E-RTK
Q1305	VSKRC404E++-1Y	AB		J	Transistor KRC404E-RTK
Q1306	VSiMH23T110-1Y	AC		J	Transistor IMH23T110
Q1307	VSKTA1504SG-1Y	AA		J	Transistor
Q1309	VSKTC3875SG-1Y	AB		J	Transistor
Q1310	VSKTA1504SG-1Y	AA		J	Transistor
Q1311	VSiMH23T110-1Y	AC		J	Transistor IMH23T110
Q1312	VSKRC404E++-1Y	AB		J	Transistor KRC404E-RTK
Q1609	VSKRC402E++-1Y	AB		J	Transistor
Q1610	VSKTA1535T+-1Y	AC		J	Transistor KTA1535T-RTK/P
Q1617	VSKTC3875SG-1Y	AB		J	Transistor
Q1618	VS2SC3265Y+-1Y	AC	N	J	Transistor 2SC3265-Y(TE85L,F)
Q1619	VSKTC3875SG-1Y	AB		J	Transistor
Q1620	VSKTA1504SG-1Y	AA		J	Transistor
Q1804	VSKRC402E++-1Y	AB		J	Transistor
Q1808	VSKTA1535T+-1Y	AC		J	Transistor KTA1535T-RTK/P
Q1812	VSRN4983///-1Y	AC		J	Transistor RN4983(TE85L,F)
Q1819	VSKTC3875SG-1Y	AB		J	Transistor
Q1820	VS2SC3265Y+-1Y	AC	N	J	Transistor 2SC3265-Y(TE85L,F)
Q1821	VSKTC3875SG-1Y	AB		J	Transistor
Q1822	VSKTA1504SG-1Y	AA		J	Transistor
Q2003	VSRT1P141U/-1Y	AB		J	Transistor RT1P141U-T111-1
Q2004	VSRT1N141U/-1Y	AB		J	Transistor RT1N141U-T111-1
Q2006	VSRT1N141U/-1Y	AB		J	Transistor RT1N141U-T111-1
Q2603	VSKRC404E++-1Y	AB		J	Transistor KRC404E-RTK
Q2704	VSKRC404E++-1Y	AB		J	Transistor KRC404E-RTK
Q8001	VSHN7G04FUA-1Y	AB	N	J	Transistor HN7G04FU-A(TE85L,F)
Q9001	VSRN1102///-1Y	AB		J	Transistor RN1102(TE85L,F)
Q9601	VSRN1902///-1Y	AC		J	Transistor RN1902(TE85L,F)/(T5L,F,T)
Q9602	VSRT1N141U/-1Y	AB		J	Transistor RT1N141U-T111-1
Q9603	VSKTC3875SG-1Y	AB		J	Transistor
Q9701	VSRN4982///-1Y	AB		J	Transistor RN4982(TE85L,F)
Q9702	VSRN4982///-1Y	AB		J	Transistor RN4982(TE85L,F)
R509	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R510	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R511	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R512	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R514	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R515	VRS-TV1JD750JY	AA		J	Resistor 75 1/10W Metal Oxide
R526	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R535	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R536	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R537	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R538	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R539	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R540	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R543	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R544	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R545	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R546	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R547	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R549	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R552	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R554	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R555	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R558	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R559	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R561	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R569	VRS-TV1JD750JY	AA		J	Resistor 75 1/10W Metal Oxide
R572	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R573	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R574	VRS-TV1JD750JY	AA		J	Resistor 75 1/10W Metal Oxide
R579	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R580	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R581	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R582	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R588	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R589	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R590	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R591	VRS-TV1JD750JY	AA		J	Resistor 75 1/10W Metal Oxide
R592	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R596	VRS-TV1JD471JY	AA		J	Resistor 470 1/10W Metal Oxide
R597	VRS-TV1JD471JY	AA		J	Resistor 470 1/10W Metal Oxide
R601	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R602	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R1101	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R1102	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R1103	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1105	VRS-CZ1JF471JY	AA		J	Resistor 470 1/16W Metal Oxide
R1107	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
R1109	VRS-CZ1JF331JY	AA		J	Resistor 330 1/16W Metal Oxide
R1113	VRS-CZ1JF123FY	AA		J	Resistor 12k 1/16W Metal Oxide
R1114	VRS-CZ1JF392JY	AA		J	Resistor 3.9k 1/16W Metal Oxide
R1115	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1118	VRS-CZ1JF272FY	AA		J	Resistor 2.7k 1/16W Metal Oxide
R1119	VRS-CZ1JF182JY	AA		J	Resistor 1.8k 1/16W Metal Oxide
R1120	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1121	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1124	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1125	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R1127	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1128	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1130	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1133	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1134	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1135	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1136	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1137	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1138	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1139	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1140	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1301	VRS-CJ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R1302	VRS-CG1JF202JY	AA	N	J	Resistor 2.0k 1/16W Metal Oxide
R1305	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1308	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1310	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R1311	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R1314	VRS-CZ1JF473FY	AA		J	Resistor 47k 1/16W Metal Oxide
R1315	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1317	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R1318	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R1321	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1322	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1323	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1325	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1326	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1328	VRS-CG1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R1329	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1330	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1333	VRS-CZ1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R1334	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R1335	VRS-CZ1JF562JY	AA		J	Resistor 5.6k 1/16W Metal Oxide
R1337	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1338	VRS-CZ1JF332JY	AA		J	Resistor 3.3k 1/16W Metal Oxide
R1339	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1340	VRS-CY1JF564JY	AA		J	Resistor 560k 1/16W Metal Oxide
R1341	VRS-CZ1JF153JY	AA		J	Resistor 15k 1/16W Metal Oxide
R1342	VRS-CY1JF564JY	AA		J	Resistor 560k 1/16W Metal Oxide
R1343	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1344	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1345	VRS-CZ1JF153JY	AA		J	Resistor 15k 1/16W Metal Oxide
R1602	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1603	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1606	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1609	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1610	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1612	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1613	VRS-CZ1JF274JY	AA		J	Resistor 270k 1/16W Metal Oxide
R1614	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1615	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1616	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1617	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1618	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1619	VRS-CZ1JF1R0JY	AA		J	Resistor 1 1/16W Metal Oxide
R1620	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1621	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1638	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1639	VRS-CZ1JF331JY	AA		J	Resistor 330 1/16W Metal Oxide
R1640	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1641	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1642	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1644	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1645	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1646	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R1651	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1652	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1653	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1654	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1655	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1656	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1657	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1658	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1660	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1663	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1665	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide

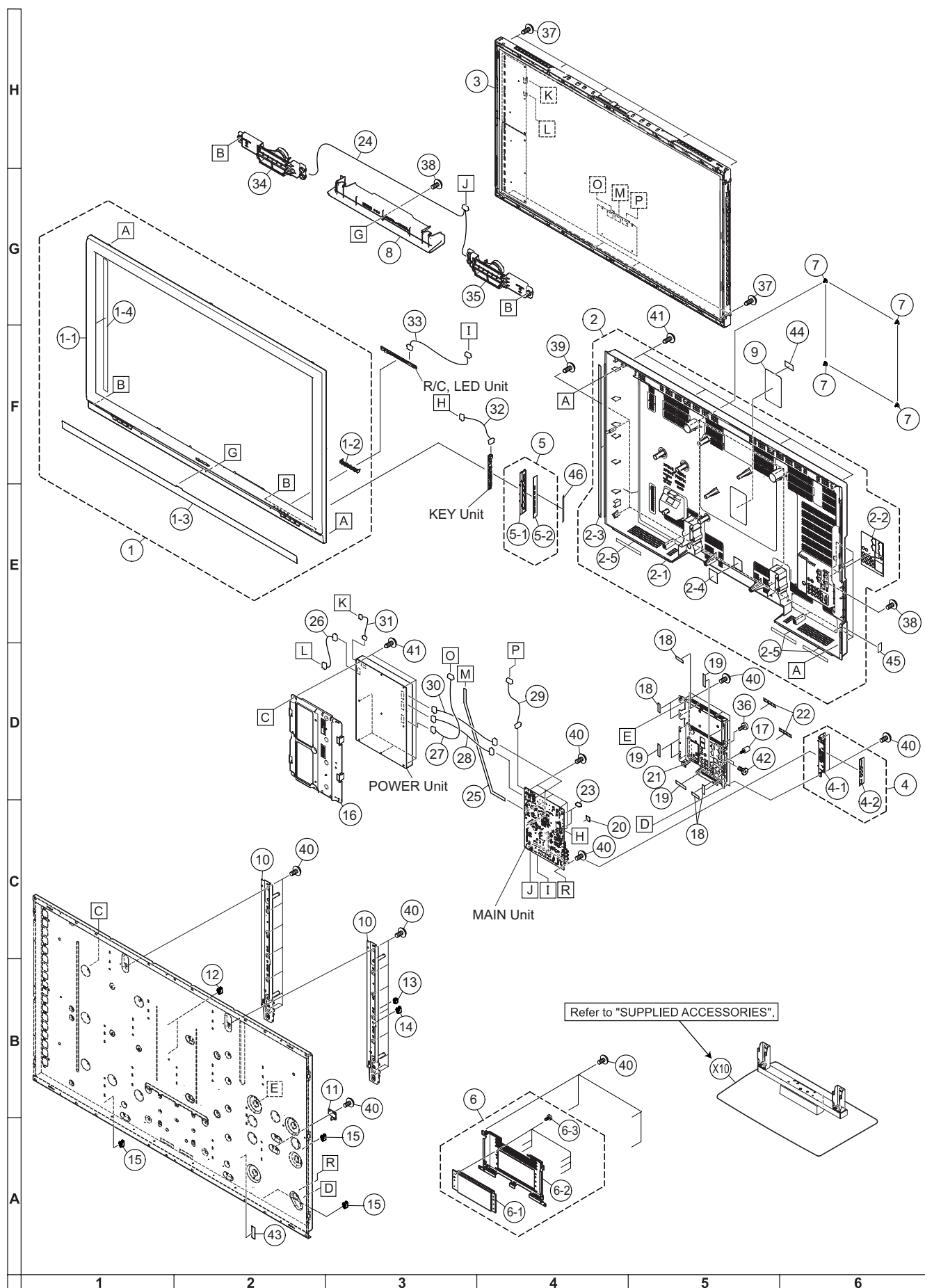
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
R1668	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1669	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1670	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1671	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1672	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1685	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1686	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1687	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1688	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1689	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1690	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1692	VRS-CZ1JF471JY	AA		J	Resistor 470 1/16W Metal Oxide
R1693	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1801	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1802	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1806	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1807	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1808	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1809	VRS-CZ1JF274JY	AA		J	Resistor 270k 1/16W Metal Oxide
R1810	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1811	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1812	VRS-CZ1JF471JY	AA		J	Resistor 470 1/16W Metal Oxide
R1813	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1814	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1815	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1816	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R1817	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R1818	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1819	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1820	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1821	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R1822	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1823	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1824	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1825	VRS-TV1JD750JY	AA		J	Resistor 75 1/10W Metal Oxide
R1826	VRS-TV1JD750JY	AA		J	Resistor 75 1/10W Metal Oxide
R1827	VRS-TV1JD750JY	AA		J	Resistor 75 1/10W Metal Oxide
R1828	VRS-CZ1JF330JY	AA		J	Resistor 33 1/16W Metal Oxide
R1838	VRS-CZ1JF330JY	AA		J	Resistor 33 1/16W Metal Oxide
R1842	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1846	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1847	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1848	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1849	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1850	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1851	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1852	VRS-CZ1JF331JY	AA		J	Resistor 330 1/16W Metal Oxide
R1853	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1854	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1855	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1856	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1857	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1858	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1859	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R1861	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1862	VRS-CZ1JF1R0JY	AA		J	Resistor 1 1/16W Metal Oxide
R1864	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1865	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1866	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1867	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1868	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1869	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1870	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1871	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1872	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1881	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R1882	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R1883	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R1885	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1887	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1888	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1889	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1899	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1900	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1901	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1916	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1917	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1918	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1919	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R1920	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2001	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R2002	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R2003	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R2004	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2006	VRS-CZ1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
R2007	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R2008	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R2009	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R2010	VRS-CZ1JF333JY	AA		J	Resistor 33k 1/16W Metal Oxide
R2011	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R2012	VRS-CH1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2014	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R2015	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2016	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2017	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2018	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2019	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2020	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2022	VRS-CZ1JF333JY	AA		J	Resistor 33k 1/16W Metal Oxide
R2023	VRS-CZ1JF473FY	AA		J	Resistor 47k 1/16W Metal Oxide
R2024	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R2025	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2026	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2028	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2029	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2030	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R2031	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2032	VRS-CZ1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R2033	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R2034	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2036	VRS-CZ1JF105JY	AA		J	Resistor 1M 1/16W Metal Oxide
R2038	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2042	VRS-CH1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R2044	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2047	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R2048	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R2049	VRS-CZ1JF272FY	AA		J	Resistor 2.7k 1/16W Metal Oxide
R2050	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R2051	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2052	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2057	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2058	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2060	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2061	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2062	VRS-CZ1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R2063	VRS-CZ1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R2064	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2068	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2070	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2071	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2072	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R2075	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2077	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R2078	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2505	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R2506	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R2507	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R2601	VRS-CH1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R2602	VRS-CH1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R2603	VRS-CZ1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R2604	VRS-CZ1JF223JY	AA		J	Resistor 22k 1/16W Metal Oxide
R2619	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2620	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2622	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2623	VRS-CZ1JF105JY	AA		J	Resistor 1M 1/16W Metal Oxide
R2635	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2636	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R2637	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2638	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2639	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R2641	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2642	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2643	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2644	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2715	VRS-CZ1JF224FY	AA		J	Resistor 220k 1/16W Metal Oxide
R2717	VRS-CZ1JF273FY	AA		J	Resistor 27k 1/16W Metal Oxide
R2719	VRS-CZ1JF562JY	AA		J	Resistor 5.6k 1/16W Metal Oxide
R2726	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2731	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2741	VRS-CZ1JF753JY	AA		J	Resistor 75k 1/16W Metal Oxide
R2742	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R2744	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R2752	VRS-CZ1JF224FY	AA		J	Resistor 220k 1/16W Metal Oxide
R2753	VRS-CZ1JF683FY	AA		J	Resistor 68k 1/16W Metal Oxide
R2754	VRS-CZ1JF223FY	AA		J	Resistor 22k 1/16W Metal Oxide
R8001	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R8002	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R8003	VRS-CZ1JF101FY	AA		J	Resistor 100 1/16W Metal Oxide
R8004	VRS-CZ1JF390FY	AA		J	Resistor 39 1/16W Metal Oxide
R8005	VRS-CZ1JF512FY	AA		J	Resistor 5.1k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
R8006	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8007	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8008	VRS-CZ1JF561JY	AA		J	Resistor 560 1/16W Metal Oxide
R8009	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8010	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8011	VRS-CZ1JF105JY	AA		J	Resistor 1M 1/16W Metal Oxide
R8012	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8013	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8016	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8018	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8020	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8024	VRS-CZ1JF560JY	AA		J	Resistor 56 1/16W Metal Oxide
R8025	VRS-CZ1JF560JY	AA		J	Resistor 56 1/16W Metal Oxide
R8026	VRS-CZ1JF560JY	AA		J	Resistor 56 1/16W Metal Oxide
R8027	VRS-CZ1JF560JY	AA		J	Resistor 56 1/16W Metal Oxide
R8028	VRS-CZ1JF560JY	AA		J	Resistor 56 1/16W Metal Oxide
R8029	VRS-CZ1JF560JY	AA		J	Resistor 56 1/16W Metal Oxide
R8031	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8032	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8033	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8034	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8035	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8036	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8037	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8038	VRS-CZ1JF303JY	AA		J	Resistor 30k 1/16W Metal Oxide
R8039	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R8046	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8047	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8048	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8049	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8051	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8052	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8054	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R8056	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8058	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8060	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8061	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8062	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8063	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8065	VRS-CZ1JF330JY	AA		J	Resistor 33 1/16W Metal Oxide
R8072	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R8073	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R8074	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R8075	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R8076	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R8077	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R8078	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R8079	VRS-CZ1JF750JY	AA		J	Resistor 75 1/16W Metal Oxide
R8151	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8152	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8153	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8154	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8157	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R8158	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R8181	VRS-CG1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R8182	VRS-CG1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R8183	VRS-CG1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R8184	VRS-CG1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R8185	VRS-CG1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R8186	VRS-CG1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R8451	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R8453	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8455	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8456	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R8457	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R8458	VRS-CH1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8459	VRS-CH1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8462	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8463	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8474	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R8475	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R9001	VRS-TV1JD101JY	AA		J	Resistor 100 1/10W Metal Oxide
R9002	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9003	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9007	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9008	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9009	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9010	VRS-CZ1JF182JY	AA		J	Resistor 1.8k 1/16W Metal Oxide
R9011	VRS-CZ1JF182JY	AA		J	Resistor 1.8k 1/16W Metal Oxide
R9013	VRS-CG1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9018	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9019	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R9020	VRS-TV1JD101JY	AA		J	Resistor 100 1/10W Metal Oxide
R9021	VRS-TV1JD101JY	AA		J	Resistor 100 1/10W Metal Oxide
R9023	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide

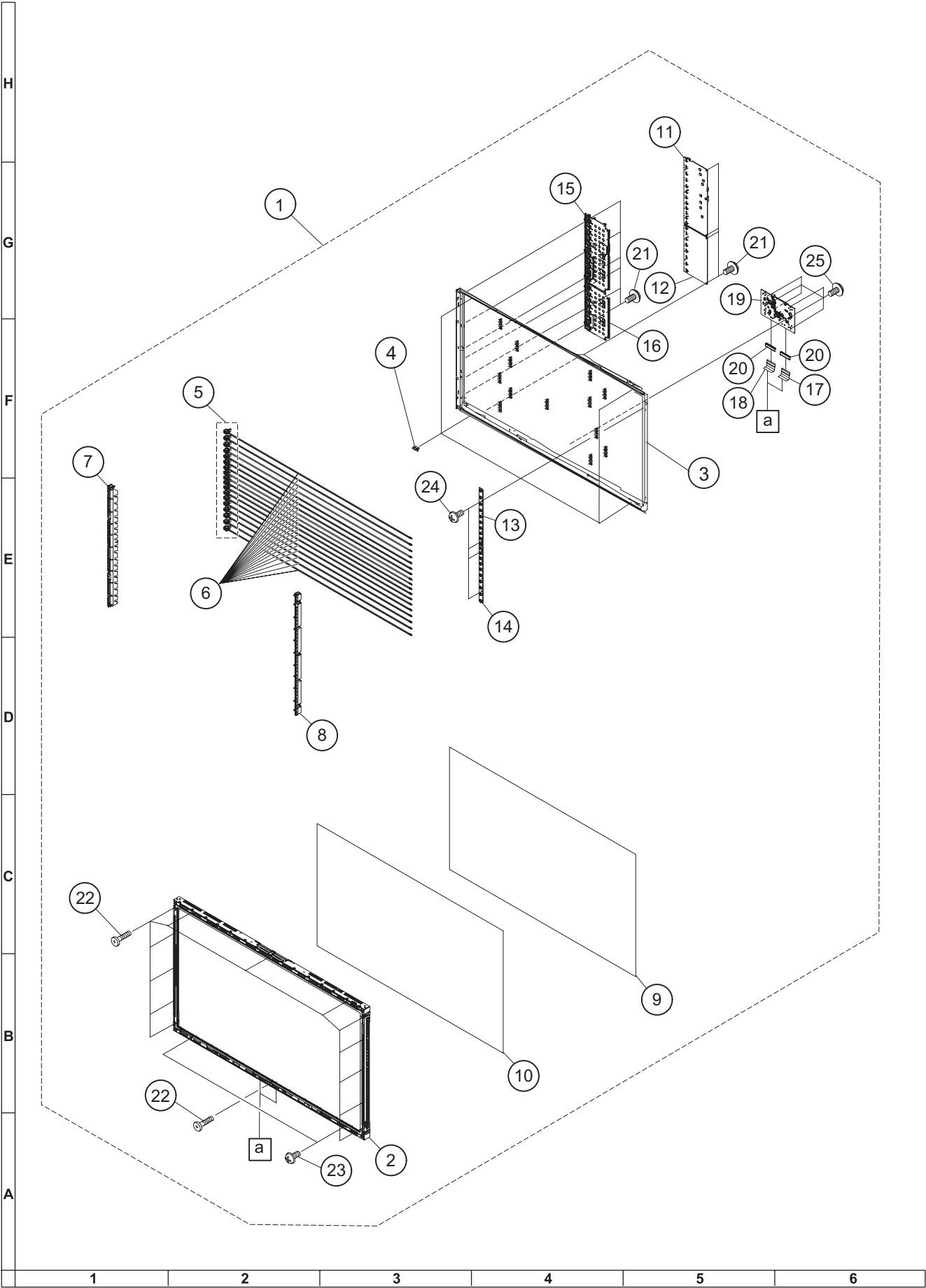
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKE833FM05 (MAIN Unit)					
R9025	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9026	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9027	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9028	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9301	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R9302	VRS-CZ1JF332JY	AA		J	Resistor 3.3k 1/16W Metal Oxide
R9305	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9308	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9319	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9326	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R9601	VRS-CZ1JF103FY	AB		J	Resistor 10k 1/16W Metal Oxide
R9602	VRS-CG1JF103JY	AB		J	Resistor 10k 1/16W Metal Oxide
R9603	VRS-CZ1JF272FY	AA		J	Resistor 2.7k 1/16W Metal Oxide
R9604	VRS-CZ1JF182JY	AA		J	Resistor 1.8k 1/16W Metal Oxide
R9605	VRS-CZ1JF562JY	AA		J	Resistor 5.6k 1/16W Metal Oxide
R9606	VRS-CZ1JF390JY	AA		J	Resistor 39 1/16W Metal Oxide
R9607	VRS-CZ1JF471JY	AA		J	Resistor 470 1/16W Metal Oxide
R9608	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9609	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9610	VRS-CZ1JF682JY	AA		J	Resistor 6.8k 1/16W Metal Oxide
R9611	VRS-CZ1JF473FY	AA		J	Resistor 47k 1/16W Metal Oxide
R9612	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9613	VRS-CZ1JF103FY	AB		J	Resistor 10k 1/16W Metal Oxide
R9614	VRS-CZ1JF103FY	AB		J	Resistor 10k 1/16W Metal Oxide
R9615	VRS-CZ1JF4R7JY	AA		J	Resistor 4.7 1/16W Metal Oxide
R9616	VRS-CZ1JF123FY	AA		J	Resistor 12k 1/16W Metal Oxide
R9617	VRS-CZ1JF561JY	AA		J	Resistor 560 1/16W Metal Oxide
R9618	VRS-CZ1JF272FY	AA		J	Resistor 2.7k 1/16W Metal Oxide
R9619	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9620	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R9621	VRS-CZ1JF4R7JY	AA		J	Resistor 4.7 1/16W Metal Oxide
R9622	VRS-CZ1JF103FY	AB		J	Resistor 10k 1/16W Metal Oxide
R9623	VRS-CZ1JF273FY	AA		J	Resistor 27k 1/16W Metal Oxide
R9624	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9625	VRS-CZ1JF103FY	AB		J	Resistor 10k 1/16W Metal Oxide
R9629	VRS-CZ1JF390JY	AA		J	Resistor 39 1/16W Metal Oxide
R9630	VRS-TW2HF1R0JY	AA		J	Resistor 1 1/2W Metal Oxide
R9631	VRS-TW2HF1R0JY	AA		J	Resistor 1 1/2W Metal Oxide
R9633	VRS-CZ1JF390JY	AA		J	Resistor 39 1/16W Metal Oxide
R9634	VRS-CZ1JF4R7JY	AA		J	Resistor 4.7 1/16W Metal Oxide
R9701	VRS-CZ1JF563JY	AA		J	Resistor 56k 1/16W Metal Oxide
R9702	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9704	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9705	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R9706	VRS-CZ1JF150JY	AA		J	Resistor 15 1/16W Metal Oxide
R9736	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9738	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R9739	VRS-CZ1JF333FY	AA		J	Resistor 33k 1/16W Metal Oxide
R9740	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R9741	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
RDA8001	PRDARA724WJFW	AH	N	J	Heat Sink
RDA8002	PRDARA731WJFW	AH	N	J	Heat Sink
SC1601	QSOCZA149WJQZY	AF		J	Socket
SC1602	QSOCZA171WJZZY	AF		J	Socket
SC1801	QSOCZA171WJZZY	AF		J	Socket
SC1802	QSOCZA171WJZZY	AF		J	Socket
SC1803	QSOCZA171WJZZY	AF		J	Socket
SC1804	QSOCNA770WJZZ	AG		J	Socket
SC9001	QSOCNA769WJZZ	AG		J	Socket
SC9201	QCNCWA715WJQZY	AK		J	Connector
SC9202	QCNCWA715WJQZY	AK		J	Connector
SC9302	QCNCWA562WJQZY	AF		J	Connector
TH2001	VHHM1103J03-1Y	AC		J	Thermistor
TU1101	RTUDAA033WJQZ	AY	N	J	Tuner
VA8001	RH-VXA074WJZZY	AB		J	Varistor AVRL101A1R1NTB
VA8002	RH-VXA074WJZZY	AB		J	Varistor AVRL101A1R1NTB
X2002	RFILZA023WJQZY	AD		J	Crystal Filter
X8001	RCRSCA039WJZZY	AG		J	Crystal
N	PCLICA004WJKZ	AC		J	Clip
N	PSPA2C152WJKZ	AG		J	Spacer
N	PSPA2C227WJKZ	AC	N	J	Spacer
N	PSPA2C230WJKZ	AC	N	J	Spacer
N	PSPA2C232WJKZ	AK	N	J	Spacer
N	PSPA2C233WJKZ	AK	N	J	Spacer

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[4] DUNTKE264FM02 (R/C, LED Unit)					
C102	VCKYTV1CF225ZY	AB		J	Capacitor 2.2 16V Ceramic
C104	VCEASX1CN106MY	AC		J	Capacitor 10 16V Electrolytic
C105	VCKYCY1HF103ZY	AA		J	Capacitor 0.01 50V Ceramic
C107	VCEASY1CN107MY	AC		J	Capacitor 100 16V Electrolytic
D101	RH-EXA092WJZZY	AB		J	Diode UDZSFVTE-1712B
D103	RH-PX0421CEZZY	AD		J	Diode CL-165HR/YG-D-T
D114	RH-PX0421CEZZY	AD		J	Diode CL-165HR/YG-D-T
D115	RH-PX0421CEZZY	AD		J	Diode CL-165HR/YG-D-T
IC101	VHiGA1S100W-1Y	AE		J	IC GA1A1S100WP
P101	QPLGNA335WJZZY	AD		J	Plug
Q102	VSKTC3875SG-1Y	AB		J	Transistor
Q103	VSKTC3875SG-1Y	AB		J	Transistor
Q104	VSKTC3875SG-1Y	AB		J	Transistor
Q106	VSKTC3875SG-1Y	AB		J	Transistor
Q107	VSKTC3875SG-1Y	AB		J	Transistor
R101	VRS-CY1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R104	VRS-CY1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R105	VRS-CY1JF393JY	AA		J	Resistor 39k 1/16W Metal Oxide
R108	VRS-CY1JF161JY	AA		J	Resistor 160 1/16W Metal Oxide
R109	VRS-CY1JF821JY	AA		J	Resistor 820 1/16W Metal Oxide
R117	VRS-CY1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R121	VRS-CY1JF821JY	AA		J	Resistor 820 1/16W Metal Oxide
R122	VRS-CY1JF161JY	AA		J	Resistor 160 1/16W Metal Oxide
R123	VRS-CJ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R124	VRS-CJ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R135	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
RMC101	RRMCUA053WJZZ	AE		J	Remote Receiver
SLD101	PSLDPA076WJFW	AD		J	Shield Case Shield
[5] DUNTKE266FM02 (KEY Unit)					
D151	RH-EX0646GEZZY	AA		J	Diode MTZJT-7215B
D152	RH-EX0646GEZZY	AA		J	Diode MTZJT-7215B
D155	RH-EX0646GEZZY	AA		J	Diode MTZJT-7215B
P151	QPLGNA059WJZZ	AC		J	Plug
R151	VRD-RA2BE822JY	AA		J	Resistor 8.2k 1/8W Carbon
R152	VRD-RA2BE123JY	AA		J	Resistor 12k 1/8W Carbon
R153	VRD-RA2BE822JY	AA		J	Resistor 8.2k 1/8W Carbon
R154	VRD-RA2BE123JY	AA		J	Resistor 12k 1/8W Carbon
S151	QSW-K0003AJZZ+	AB		J	Switch
S152	QSW-K0003AJZZ+	AB		J	Switch
S153	QSW-K0003AJZZ+	AB		J	Switch
S154	QSW-K0003AJZZ+	AB		J	Switch
S155	QSW-K0003AJZZ+	AB		J	Switch
S156	QSW-K0003AJZZ+	AB		J	Switch
S157	QSW-K0003AJZZ+	AB		J	Switch

[6] CABINET AND MECHANICAL PARTS (LC-46SB57U)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[6] CABINET AND MECHANICAL PARTS (LC-46SB57U)					
1	CCABAC343WJ31	BN	N	X	Front Cabinet Ass'y
1-1	Not Available	-	N	-	Front Cabinet
1-2	HDECOA777WJ3A	AX		J	LED Decoration
1-3	HPNLSA217WJ3B	AS	N	X	SP Sheet
1-4	PSPAHB965WJZZ		N	X	Spacer
2	CCABBB543WJ31	BM		X	Rear Cabinet Ass'y
2-1	Not Available	-	N	-	Rear Cabinet
2-2	HINDPC908WJSA	AF		X	Terminal Label (Back)
2-3	Not Available	-	N	-	Spacer (200x7)
2-4	Not Available	-	N	-	Spacer (40x40)
2-5	PSPA2C221WJKZ				Spacer (120x4x0.4), x3
3	R1LK460D3LW80Z	EL		X	46" LCD Panel Module Unit (LK460D3LW80Z2)
4	CCOVAC951WJ02	AK	N	X	Side AV Cover Ass'y
4-1	Not Available	-	N	-	Side Terminal Cover
4-2	Not Available	-	N	-	Side Terminal Label
5	CCOVAC952WJ01	AK		X	KEY Button Cover Ass'y
5-1	Not Available	-	N	-	KEY Button Cover
5-2	Not Available	-	N	-	Control Button Label
6	CSLDMB612WJ01	AV		X	Control Shield Ass'y
6-1	PRDARA644WJFW	AP		X	Control Radiator
6-2	Not Available	-	N	-	Control Shield
6-3	XBPS730P06WS0	AA		J	Screw (for Radiator), x6
7	GCOVAC576WJKZ	AC		J	VESA Hole Cover, x4
8	GCOVAC954WJKA	AM		X	Bottom Cover
9	HINDPD321WJSA	AD	N	X	Model Label
10	LANGKB834WJFW	AU		X	Panel Support Angle, x2
11	LANGKC082WJFW	AC		X	Main PWB Angle
12	LHLDWA133WJKZ	AC		J	Wire Holder, x2
13	LHLDWA151WJKZ	AB		J	Wire Holder
14	LHLDWA172WJKZ	AD		J	Wire Holder
15	LHLDWA175WJUZ	AC		J	Wire Holder, x3
16	LHLDZB444WJ3Z	AN		X	Power PWB Holder
17	NSFTZA284WJFW	AC		J	Hexagon Nut, x4
18	PMLT-A593WJZZ	AC		X	Gasket (8x35x7), x5
19	PMLT-A594WJZZ	AD		X	Gasket (8x50x7), x5
20	PMLT-A597WJQZ	AF		X	Gasket (Tuner)
21	PSLDMB560WJFW	AR		X	Main PWB Shield
22	PSPA2B963WJKZ	AD		J	Conductor (JACK), x2
23	QCNCMA275WJQZ	AC		J	Connector (MODEL SELECT), x2
24	QCNW-H495WJPZ	AL		X	Connecting Cord (SP)
25	QCNW-H776WJQZ	AX		X	Connecting Cord (LW)
26	QCNW-H812WJQZ	AF		X	Connecting Cord (LA)
27	QCNW-H813WJQZ	AF		X	Connecting Cord (PL)
28	QCNW-J129WJQZ	AL		X	Connecting Cord (PD)
29	QCNW-J130WJQZ	AH		X	Connecting Cord (LP)
30	QCNW-J131WJQZ	AH		X	Connecting Cord (LB1)
31	QCNW-J132WJQZ	AF		X	Connecting Cord (LB2)
32	QCNW-J133WJQZ	AF		X	Connecting Cord (KM)
33	QCNW-J591WJQZ	AL	N	X	Connecting Cord (RA)
34	RSP-ZA379WJZZ	AQ		X	Speaker-L
35	RSP-ZA380WJZZ	AQ		X	Speaker-R
36	XBPS830P06000	AA		J	Screw (for HDMI), x3
37	XEBS740P08000	AB		J	Screw (for Front Cabinet), x8
38	XEBS930P10000	AA		J	Screw (for S-Video, Bottom Cover), x2
39	XEBS940P16000	AB		J	Screw (for Cabinet), x9
40	XHPS830P06WS0	AA		J	Screw (for BL), x35
41	XHPS830P10WS0	AB		J	Screw (for Power PWB), x6/(for Rear Cabinet), x4
42	XIPSN20P04000	AA		J	Screw (for Side HDMI), x2
43	TLABK0023TAZZ	AA		J	Label
44	TLABNB037WJZZ	-		-	Serial No. Label (Back)
45	TLABNC391WJZZ	-	N	-	Serial No. Label (Side)
46	PSPA2C221WJKZ				Spacer

[7] LCD MODULE Assembly (LC-46SB57U)

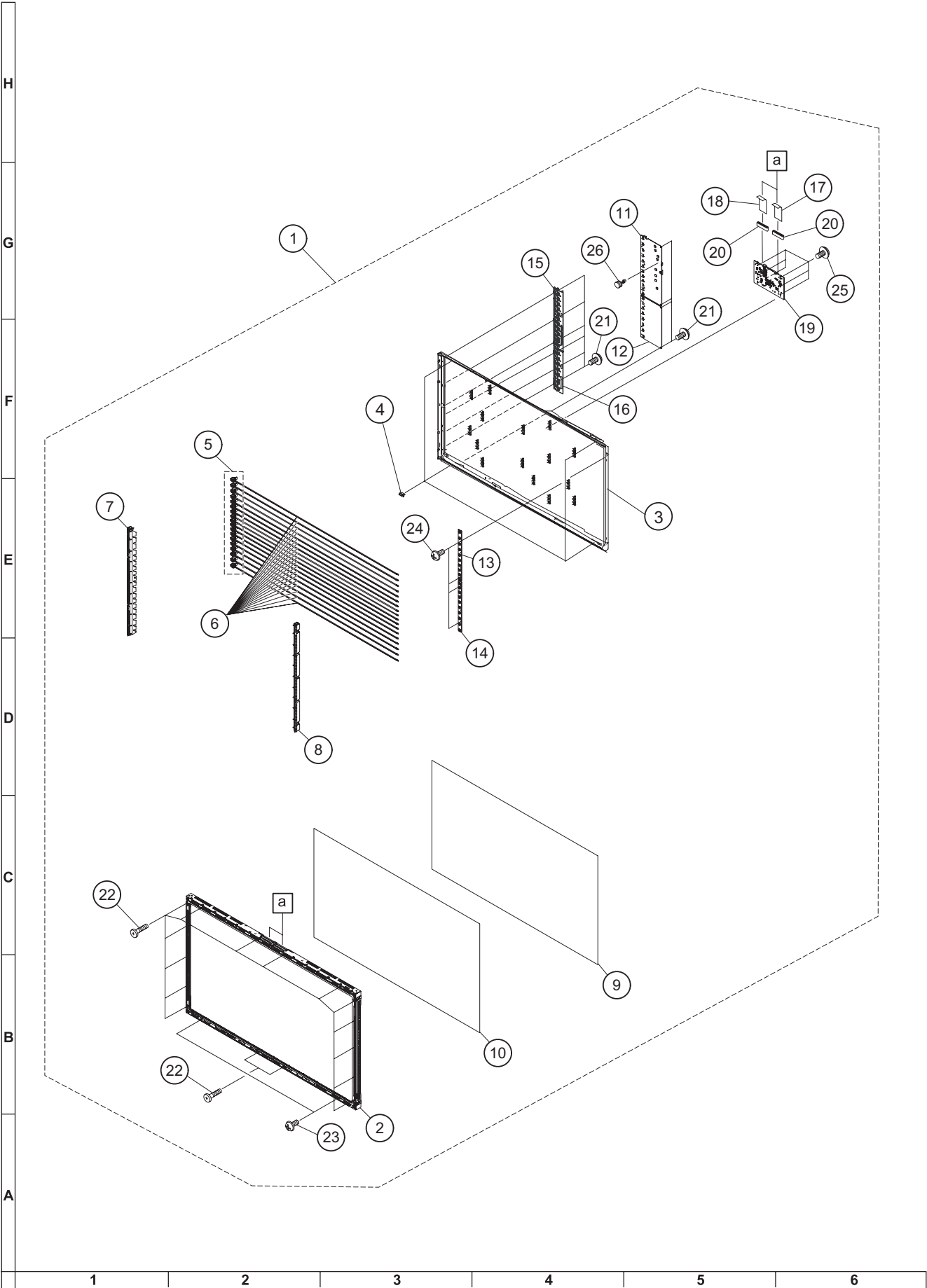


NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[7] LCD MODULE Assembly (LC-46SB57U)					
1	R1LK460D3LW80Z	EL		X	46" LCD Panel Module Unit (LK460D3LW80Z2)
2	Not Available	-		-	Bezel Ass'y
3	Not Available	-		-	BL Chassis Ass'y
4	LHLDZA963WJKZ	AB		J	Holder, x4
5	QSOCFA007WJZZ	AD		J	Socket, x18
6	RLMPLA038WJN1	AR		J	Lamp, x18
7	CHLDZB349WJ01	AU		J	Lamp Holder Unit
8	CHLDZB350WJ01	AU		J	Lamp Holder Unit
9	PCOVUA113WJZZ	BA		J	Diffusion Plate
10	PSHEPA873WJZZ	AX		J	Lens Sheet
11	RUNTKA538WJN1	BF		J	Inverter Unit-1
12	RUNTKA539WJN1	BF		J	Inverter Unit-2
13	RUNTKA540WJZZ	AP		J	GND-PWB (INVERTER GND Unit-1)
14	RUNTKA541WJZZ	AP		J	GND-PWB (INVERTER GND Unit-2)
15	PCOVWA059WJKZ	AM		J	Cover
16	PCOVWA060WJKZ	AM		J	Cover
17	QPWBM0782TPZZ	AG		J	FPC
18	QPWBM0783TPZZ	AG		J	FPC
19	CPWBX4023TPXA	BW		J	C-PWB (LCD Control Unit)
20	RCORFA061WJZZ	AG		J	Ferrite Core, x2
21	XHPS830P06WS0	AA		J	Screw, x10 (for Inverter Unit x4, for Cover x6)
22	LX-HZA059WJF7	AB		J	Screw, x14 (for fixing Bezel Ass'y)
23	LX-HZA060WJF7	AB		J	Screw, x2 (for fixing Bezel Ass'y)
24	LX-HZA046WJF7	AB		J	Screw, x4 (for GND-PWB)
25	LX-HZA045WJF7	AB		J	Screw, x6 (for C-PWB)



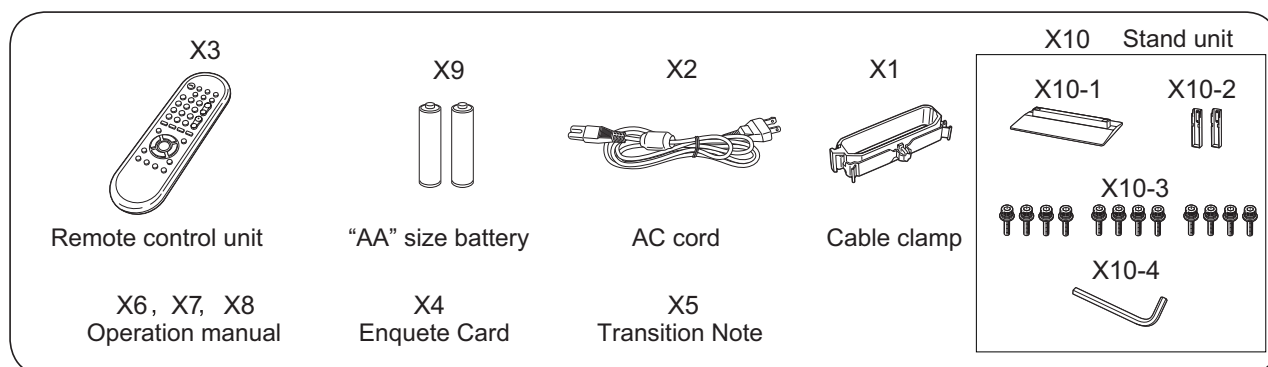
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[8] CABINET AND MECHANICAL PARTS (LC-52SB57U)					
1	CCABAC123WJ01	BN		X	Front Cabinet Ass'y
1-1	Not Available	-	N	-	Front Cabinet
1-2	HDECOA777WJ3A	AX		J	LED Decoration
1-3	HPNLSA202WJKA	AU	N	X	SP Sheet
2	CCABBB540WJ01	BP	N	X	Rear Cabinet Ass'y
2-1	Not Available	-	N	-	Rear Cabinet
2-2	HiNDPC908WJSA	AF		X	Terminal Label (Back)
3	R1LK520D3LW80Z	EY		X	52" LCD Panel Module Unit (LK520D3LW80Z2)
4	CCOVAC951WJ02	AK	N	X	Side AV Cover Ass'y
4-1	Not Available	-	N	-	Side Terminal Cover
4-2	Not Available	-	N	-	Side Terminal Label
5	CCOVAC952WJ01	AK		X	KEY Button Cover Ass'y
5-1	Not Available	-	N	-	KEY Button Cover
5-2	Not Available	-	N	-	Control Button Label
6	CSLDMB612WJ01	AV		X	Control Shield Ass'y
6-1	PRDARA644WJFW	AP		X	Control Radiator
6-2	Not Available	-	N	-	Control Shield
6-3	XBPS730P06WS0	AA		J	Screw (for Radiator), x6
7	GCOVAC576WJKZ			X	VESA Hole Cover, x4
8	GCOVAC954WJKA	AM		X	Bottom Cover
9	HiNDPD313WJSA	AD	N	X	Model Label
10	LANGKB678WJN3	AV		X	Panel Support Angle, x2
11	LANGKC082WJFW	AC		X	Main PWB Angle
12	LHLDWA133WJKZ	AC		J	Wire Holder
13	LHLDWA151WJKZ	AB		J	Wire Holder, x3
14	LHLDWA172WJKZ	AD		J	Wire Holder
15	LHLDWA175WJUJ	AC		J	Wire Holder, x3
16	LHLDWA176WJUJ	AC		J	Wire Holder
17	LHLDZB144WJKZ	AH		X	Corner Lug, x4
18	LHLDZB145WJKZ	AD		X	Center Lug, x2
19	LHLDZB448WJ3Z	AM	N	X	Power PWB Holder
20	NSFTZA284WJFW	AC		J	Hexagon Nut, x4
21	PMLT-A593WJZZ	AC		X	Gasket (8x35x7T), x5
22	PMLT-A594WJZZ	AD		X	Gasket (8x50x7T), x5
23	PMLT-A597WJQZ	AF		X	Gasket (Tuner)
24	PSLDMB560WJFW	AR		X	Main PWB Shield
25	PSPAAB963WJKZ	AD		J	Conductor (Jack), x2
26	PSPAAB234WJKZ	AG		X	Spacer (D:23x23x3.5T)
27	PSPAAB235WJKZ	AL		X	Spacer (A:35x15x4.5T)
28	PSPAAB236WJKZ	AL		X	Spacer (B:35x23x3.5T)
29	QCNCMA275WJQZ	AC		J	Connecting Cord (Model Selector), x2
30	QCNCW-G163WJQZ	AF		X	Connecting Cord (LA)
31	QCNCW-G170WJQZ	AE		X	Connecting Cord (PL)
32	QCNCW-H493WJQZ	AF		X	Connecting Cord (KM)
33	QCNCW-H495WJPZ	AL		X	Connecting Cord (SP)
34	QCNCW-J139WJQZ	AM		X	Connecting Cord (PD)
35	QCNCW-J140WJQZ	AK		X	Connecting Cord (LP)
36	QCNCW-J141WJQZ	AH		X	Connecting Cord (LB1)
37	QCNCW-J142WJQZ	AF		X	Connecting Cord (LB2)
38	QCNCW-J147WJQZ	AZ		X	Connecting Cord (LW)
39	QCNCW-J591WJQZ	AL	N	X	Connecting Cord (RA)
40	RSP-ZA379WJZZ	AQ		X	Speaker-L
41	RSP-ZA380WJZZ	AQ		X	Speaker-R
42	XBPS830P06000	AA		J	Screw (for HDMI), x3
43	XBPS930P08JS0	AB		J	Screw
44	XBPS930P10000	AA		J	Screw (for S-Video, Bottom Cover), x2
45	XBPS940P16000	AB		J	Screw (for Cabinet), x18
46	XHPS830P06WS0	AA		J	Screw (for BL), x33
47	XHPS830P10WS0	AB		J	Screw (for Power PWB), x6
48	XHPS840P08WS0	AB		J	Screw (for Lug), x10
49	XIPSN20P04000	AA		J	Screw (for Side HDMI), x2
50	TLABK0023TAZZ	AA		J	Label
51	TLABNB037WJZZ	-		-	Serial No. Label (Back)
52	TLABNC391WJZZ	-	N	-	Serial No. Label (Side)
53	PSPAAB966WJZZ				Spacer, x2

[9] LCD MODULE Assembly (LC-52SB57U)



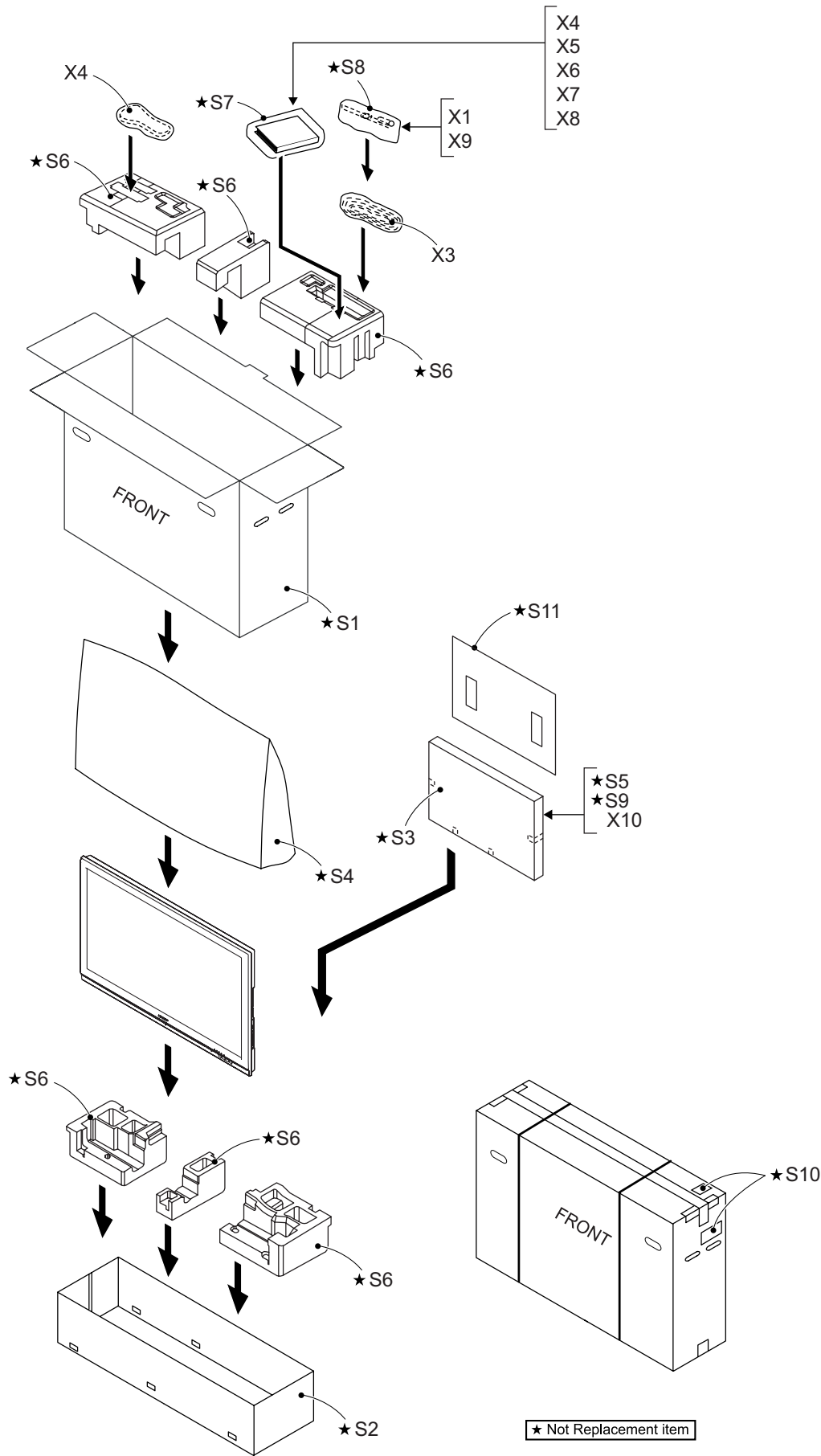
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[9] LCD MODULE Assembly (LC-52SB57U)					
1	R1LK520D3LW80Z	EY		X	52" LCD Panel Module Unit (LK520D3LW80Z2)
2	Not Available	-		-	Bezel Ass'y
3	Not Available	-		-	BL Chassis Ass'y
4	LHLDZA963WJKZ	AB		J	Holder, x4
5	QSOCFA008WJZZ	AD		J	Socket, x18
6	RLMPLA033WJN1	AR		J	Lamp, x18
7	CHLDZB353WJ01	AV		J	Lamp Holder Unit
8	CHLDZB354WJ01	AV		J	Lamp Holder Unit
9	PCOVUA158WJZZ	BD		J	Diffusion Plate
10	PSHEPA874WJZZ	BB		J	Lens Sheet
11	RUNTKA528WJN1	BF		J	Inverter Unit-1
12	RUNTKA529WJN1	BF		J	Inverter Unit-2
13	RUNTKA530WJZZ	AP		J	GND-PWB (INVERTER GND Unit-1)
14	RUNTKA531WJZZ	AP		J	GND-PWB (INVERTER GND Unit-2)
15	PCOVWA061WJKZ	AK		J	Cover
16	PCOVWA062WJKZ	AH		J	Cover
17	QPWBM0566TPZZ	AG		J	CS-FPC
18	QPWBM0574TPZZ	AG		J	CS-FPC
19	CPWBX4023TPXZ	BW		J	C-PWB (LCD Control Unit)
20	RCORFA061WJZZ	AG		J	Ferrite Core, x2
21	XHPS830P06WS0	AA		J	Screw, x10 (for Inverter Unit x4, for Cover x6)
22	LX-HZA039WJF7	AB		J	Screw, x16 (for BL Chassis Ass'y)
23	LX-HZA047WJF7	AB		J	Screw, x2 (for BL Chassis Ass'y)
24	LX-HZA046WJF7	AB		J	Screw, x4 (for GND-PWB)
25	LX-HZA045WJF7	AB		J	Screw, x6 (for C-PWB)
26	LHLDZB067WJKZ			J	Inverter Spacer

[10] SUPPLIED ACCESSORIES



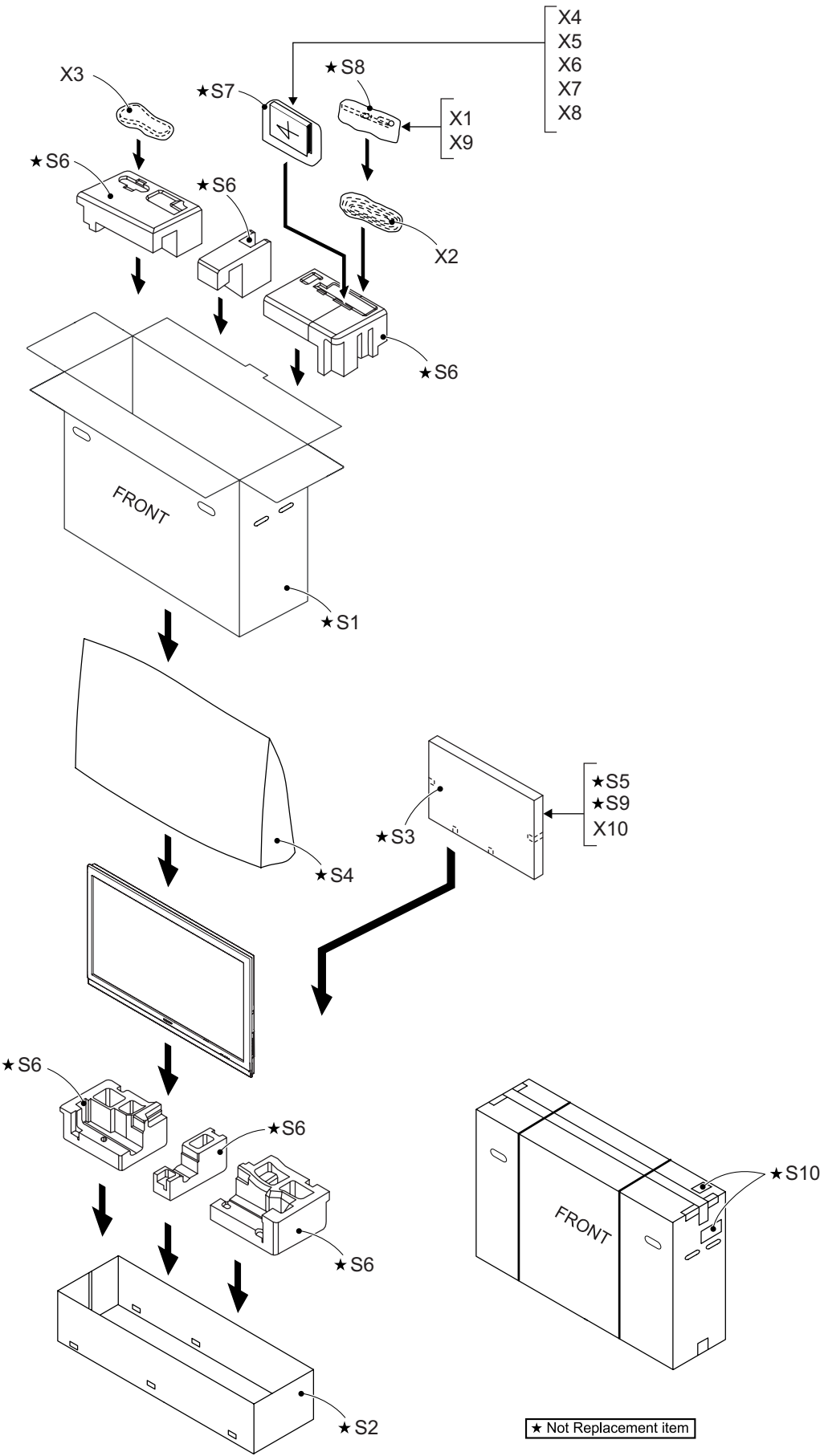
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[10] SUPPLIED ACCESSORIES					
X1	LHLDWA173WJKZ	AE		J	Cable Clamp
X2	QACCD A066WJPZ	AP		X	AC Cord
X3	RRMCGA667WJSA	AN		X	Remote Control Unit
X4	TCADEA243WJZZ	AD		X	Enquete Card
X5	TCAUZA396WJZZ	AC	N	X	Transition Note
X6	TINS-E178WJZZ	AN	N	X	Operation Manual (English)
X7	TINS-E179WJZZ	AN	N	X	Operation Manual (French)
X8	TINS-E180WJZZ	AN	N	X	Operation Manual (Spanish)
X9	Not Available	-		-	"AAA" Size Battery
X10	CDAI-A502WJ01	BM		X	Stand Unit
X10-1	CDAI-A502WJ02		N	X	Stand Base
X10-2	LANGKB757WJZZ		N	X	Supporting Post, x2
X10-3	CX-BZA194WJ05		N	X	Screws Ass'y
X10-4	UKOGLA012WJZZ			X	Tool for Stand

[11] PACKING PARTS (LC-46SB57U) (NOT REPLACEMENT ITEM)



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[11] PACKING PARTS (LC-46SB57U) (NOT REPLACEMENT ITEM)					
S1	SPAKCE926WJZZ	-	N	-	Packing Case (Main)
S2	SPAKCE471WJZZ	-		-	Packing Case (Bottom)
S3	SPAKFB626WJZZ	-	N	-	Stand Case
S4	SPAKPA999WJZZ	-		-	Wrapping Paper
S5	SPAKPB231WJZZ	-	N	-	Wrapping Paper
S6	SPAKXC170WJZZ	-		-	Packing Add.
S7	SSAKA0101GJZZ	-		-	Polyethylene Bag
S8	SSAKAA032WJZZ	-		-	Polyethylene Bag
S9	SSAKHA035WJZZ	-		-	Polyethylene Bag (for Screw)
S10	TLABKA009WJZZ	-		-	Case No. Label
S11	SPAKSA016WJZZ	-		-	Rear Pad

[12] PACKING PARTS (LC-52SB57U) (NOT REPLACEMENT ITEM)



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[12] PACKING PARTS (LC-52SB57U) (NOT REPLACEMENT ITEM)					
S1	SPAKCE957WJZZ	-	N	-	Packing Case (Main)
S2	SPAKCE353WJZZ	-		-	Packing Case (Bottom)
S3	SPAKFB626WJZZ	-	N	-	Stand Case
S4	SPAKPA992WJZZ	-		-	Wrapping Paper
S5	SPAKPB231WJZZ	-	N	-	Wrapping Paper
S6	SPAKXC097WJZZ	-		-	Packing Add.
S7	SSAKA0101GJZZ	-		-	Polyethylene Bag
S8	SSAKAA032WJZZ	-		-	Polyethylene Bag
S9	SSAKHA035WJZZ	-		-	Polyethylene Bag (for Screw)
S10	TLABKA009WJZZ	-		-	Case No. Label
[13] SERVICE JIG (USE FOR SERVICING)					
N	QCNW-C222WJQZ	AW		J	Connecting Cord (100cm 80pin)
N					LCD Control-LCD Panel, x2
N	QCNW-F676WJQZ	BH		J	Connecting Cord (100cm 41pin)
N					Main-LCD Control (LW)
N	QCNW-G405WJQZ	AP		J	Connecting Cord (100cm 4pin)
N					Main-LCD Control (PL)
N	QCNW-J349WJQZ	AS		J	Connecting Cord (150cm 15pin)
N					Main-LCD Control (LP)
N	QCNW-E343WJQZ	AM		J	Connecting Cord (100cm 3pin)
N					Power-LCD Control (LA)
N	QCNW-H184WJQZ	AX		J	Connecting Cord (100cm 12pin)
N					Main-Power (PD)
N	QCNW-J330WJQZ	AS		J	Connecting Cord (100cm 6pin)
N					Main-Power (LB1)
N	QCNW-J331WJQZ	AP		J	Connecting Cord (100cm 6-9pin)
N					Power-Inverter (LB2)

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